

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 11-1-05
 Art Unit: 1752 Phone Number 302-1333 Serial Number: 10/803,999
 Mail Box and Bldg/Room Location: 9D60 Results Format Preferred (circle): PAPER DISK E-MAIL
 (Ren.)

If more than one search is submitted, please prioritize searches in order of need.

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. See B.T.B.

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Plz. Search for a polymer having

a structure represented by the formula (I) ~~1115~~

Shown in cl. #2 at its side chain.

SCIENTIFIC REFERENCE BR
 Sci & Tech Inf. Cntr.

NOV 2 RECD

Pat. & T.M. Office

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>WLL</u>	NA Sequence (#) _____	STN <u>4347.57</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>2</u>	Questel/Orbit _____
Date Searcher Picked Up: <u>11/7/05</u>	Bibliographic _____	Dr.Link _____
Date Completed: <u>11/8/05</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>30</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: <u>30</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>50</u>	Other _____	Other (specify) _____

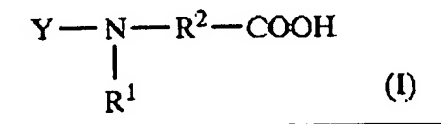
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).

2. (currently amended) *This is also called "lithographic"*
A planographic printing plate precursor comprising an intermediate layer containing a polymer having a structure represented by the following formula (I) at its side chain and an infrared laser photosensitive positive recording layer disposed on a support in this order:



wherein Y represents a connecting group connected with a main chain of the polymer; according to claim 1, wherein in the formula (I), R¹ is a (hydrocarbon group substituted with a carboxylic acid group); and R² is a (straight-chain hydrocarbon group) or an (hydrocarbon group substituted with a carboxylic acid group.)
→ such as alkyl group.

-COOH

3. (currently amended): A The planographic printing plate precursor according to claim 2, wherein in the formula (I), R¹ is an alkyl group substituted with a carboxylic acid group, and R² is a straight-chain alkylene group.



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Bib Data Sheet

CONFIRMATION NO. 6919

SERIAL NUMBER 10/803,999	FILING DATE 03/19/2004 RULE	CLASS 430	GROUP ART UNIT 1752	ATTORNEY DOCKET NO. Q80517
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APPLICANTS

Miki Takahashi, Shizuoka-ken, JAPAN;
 Hidehito Sasaki, Shizuoka-ken, JAPAN;
 Hisashi Hotta, Shizuoka-ken, JAPAN;

** CONTINUING DATA *****
 None SJL

** FOREIGN APPLICATIONS *****
 JAPAN 2003-78699 03/20/2003) SJL
 JAPAN 2003-374189 11/04/2003)

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
 ** 06/03/2004

Foreign Priority claimed <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	STATE OR COUNTRY JAPAN	SHEETS DRAWING 0	TOTAL CLAIMS 19	INDEPENDENT CLAIMS 1
35 USC 119 (a-d) conditions met <input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance	Verified and Acknowledged	Examiner's Signature <i>[Signature]</i> Initials SJL		

ADDRESS
 23373
 SUGHRUE MION, PLLC
 2100 PENNSYLVANIA AVENUE, N.W.
 SUITE 800
 WASHINGTON, DC
 20037

TITLE
 Planographic printing plate precursor

FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time)
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=> fil reg

FILE 'REGISTRY' ENTERED AT 16:06:26 ON 07 NOV 2005

=> d his

L1 FILE 'HCAPLUS' ENTERED AT 14:52:32 ON 07 NOV 2005

1 S US20040185375/PN

SEL RN

L2 FILE 'REGISTRY' ENTERED AT 14:52:53 ON 07 NOV 2005

6 S E1-E6

L3 FILE 'LREGISTRY' ENTERED AT 14:58:50 ON 07 NOV 2005

STR

L4 FILE 'REGISTRY' ENTERED AT 14:59:59 ON 07 NOV 2005

SCR 2043

L5 50 S L3 AND L4

FILE 'LREGISTRY' ENTERED AT 15:07:16 ON 07 NOV 2005

L6 STR L3

L7 STR L3

L8 STR L7

FILE 'REGISTRY' ENTERED AT 15:27:24 ON 07 NOV 2005

L9 10722 S L3 AND L4 FUL

L10 41 S L6 SAM SUB=L9

L11 6 S L9 AND L2

L12 666 S L6 FUL SUB=L9

L13 6 S L12 AND L2

SAV L9 LEE999/A

SAV L12 LEE999A/A

L14 1 S L8 SAM SUB=L9

L15 2 S L8 FUL SUB=L9

L16 STR L8

L17 23 S L16 SAM SUB=L9

L18 441 S L16 FUL SUB=L9

SAV L18 LEE999B/A

SAV L15 LEE999C/A

L19 441 S L15 OR L18

L20 0 S L19 AND L2

FILE 'HCAPLUS' ENTERED AT 15:42:47 ON 07 NOV 2005

L21 445 S L12

L22 628 S L19

L23 15 S L21(L) (PLANOG? OR LITHOG?)

L24 18 S L21 AND (PLANOG? OR LITHOG?)

L25 1 S L24 AND L1

L26 33 S L22 AND (PLANOG? OR LITHOG?)

L27 33 S L26 NOT L24

L28 34 S L21 AND PHOTO?/SC

L29 35 S L24 OR L28

=> d que 129

L3 STR

A~~N~~Ak~~COOH

1 2 3 4

```
NSPEC      IS RC      AT      1
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 4

L4 SCR 2043
L6 STR

$$\begin{array}{c}
 6 \\
 \text{COOH} \\
 \sim \\
 \text{Ak} \quad 5 \\
 \sim \\
 \text{A} \sim \text{N} \sim \text{G1} \sim \text{COOH} \\
 1 \quad 2 \quad 3 \quad 4
 \end{array}
 \quad
 \begin{array}{c}
 \text{Ak} \sim \text{COOH} \\
 @7 \quad 8
 \end{array}$$

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NSPEC      IS RC      AT      1
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8

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L12	666	SEA FILE=REGISTRY	SUB=L9 SSS FUL L6
L21	445	SEA FILE=HCAPLUS	ABB=ON PLU=ON L12
L24	18	SEA FILE=HCAPLUS	ABB=ON PLU=ON L21 AND (PLANOG? OR LITHOG?)
L28	34	SEA FILE=HCAPLUS	ABB=ON PLU=ON L21 AND PHOTO?/SC
L29	35	SEA FILE=HCAPLUS	ABB=ON PLU=ON L24 OR L28

FILE 'HCAPLUS' ENTERED AT 16:06:58 ON 07 NOV 2005

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=> d 129 1-35 ibib abs hitstr hitind
```

TITLE: Presensitized lithographic plates
with good soiling resistance and printability

INVENTOR(S): Sasaki, Hideto

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005292179	A2	20051020	JP 2004-102826	2004 0331

PRIORITY APPLN. INFO.:

JP 2004-102826

2004
0331

AB The plates comprise (A) Al supports treated with alkali metal silicates to have surface Si 5-15 mg/m², (B) interlayers containing polymers having YNR₁(R₂CO₂H) structures (Y = linkage to main chain; R₁ = H, hydrocarbyl; R₂ = hydrocarbylene) in their branches, and (C) imaging layers (containing alkali-soluble polymers and photothermal converters) in this order. The plates show no soiling of shadow parts, even when printing using small amount of dampening water and FM screens for dots.

IT 761445-20-9

(interlayers; presensitized lithog. plates with good soiling resistance and printability)

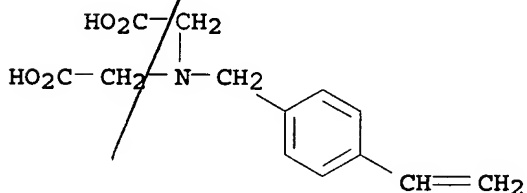
RN 761445-20-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

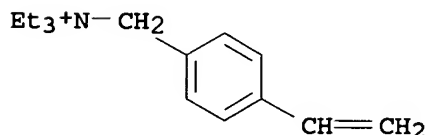
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CM 2

CRN 14350-43-7

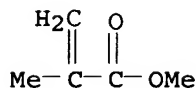
CMF C15 H24 N . Cl

● Cl⁻

CM 3

CRN 80-62-6

CMF C5 H8 O2



- IC ICM G03F007-00
ICS G03F007-004; G03F007-11; B41N001-14
- CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38, 56
- ST presensitized **lithog** plate soiling resistance
printability; alkali metal silicate treated aluminum
lithog plate; interlayer carboxylmethylamino branched
polymer presensitized **lithog** plate
- IT Silicates
(alkali metal, aluminum supports treated with; presensitized
lithog. plates with good soiling resistance and
printability)
- IT Phenolic resins
(novolak, cresol-based; presensitized **lithog.** plates
with good soiling resistance and printability)
- IT **Lithographic** plates
(presensitized; presensitized **lithog.** plates with
good soiling resistance and printability)
- IT 1344-09-8
(aluminum supports treated with; presensitized **lithog**
. plates with good soiling resistance and printability)
- IT 866641-47-6
(derived from Ethyl violet; presensitized **lithog.**
plates with good soiling resistance and printability)
- IT 761445-20-9
(interlayers; presensitized **lithog.** plates with good
soiling resistance and printability)
- IT 7439-95-4, Magnesium 7439-96-5, Manganese 7440-32-6, Titanium
7440-50-8, Copper 7440-66-6, Zinc
(microalloying element, supports; presensitized **lithog**
. plates with good soiling resistance and printability)
- IT 134127-48-3
(photothermal converters; presensitized **lithog.**
plates with good soiling resistance and printability)
- IT 106-44-5D, p-Cresol, polymers 108-39-4D, m-Cresol, polymers
68900-98-1 141634-00-6, Acrylonitrile-N-(4-
aminosulfonylphenyl)methacrylamide-methyl methacrylate copolymer
146115-88-0 504387-13-7
(presensitized **lithog.** plates with good soiling
resistance and printability)
- IT 7429-90-5, Aluminum
(suports; presensitized **lithog.** plates with good
soiling resistance and printability)
- IT 11146-28-4
(supports; presensitized **lithog.** plates with good
soiling resistance and printability)

L29 ANSWER 2 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:1106225 HCAPLUS
 TITLE: IR-sensitive positive-working
 lithographic printing plate precursors
 having intermediate layer
 INVENTOR(S): Imai, Masako; Nakamura, Ippei
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005283643	A2	20051013	JP 2004-93289	2004 0326

PRIORITY APPLN. INFO.: JP 2004-93289

2004
0326

AB Thee title printing plate precursor has an intermediate layer containing a polymer and an alkali-developable pos.-working photosensitive recording layer on a support, wherein the polymer in the intermediate layer has a repeating unit with side chains having cationic groups and their counter anions having alkali-dissociable protons. The printing plate precursor is for directly IR scanning imaging and provides printing plate of high printing durability and little soiling on the non-image area.

IT 866462-79-5P 866462-80-8P 866554-53-2P
 866554-54-3P

(intermediate layer of IR-sensitive lithog. printing plate precursors)

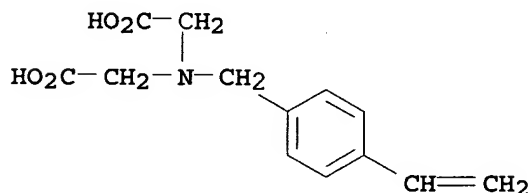
RN 866462-79-5 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

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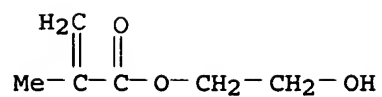
CMF C13 H15 N O4



CM 2

CRN 868-77-9

CMF C6 H10 O3



CM 3

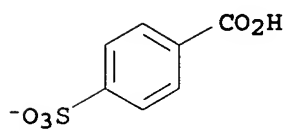
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CMF C15 H24 N . C7 H5 O5 S

CM 4

CRN 859804-50-5

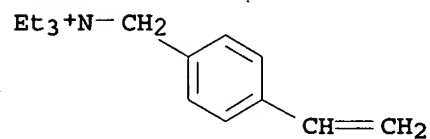
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CM 5

CRN 62858-92-8

CMF C15 H24 N



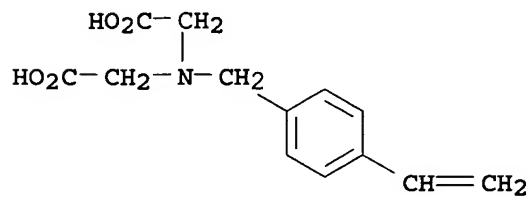
RN 866462-80-8 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

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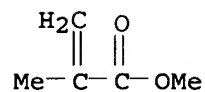
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CM 2

CRN 80-62-6
CMF C5 H8 O2

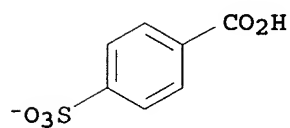


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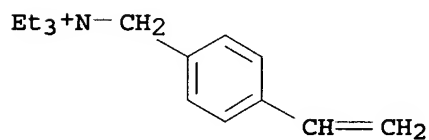
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CMF C7 H5 O5 S



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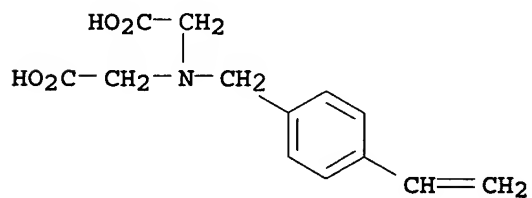
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RN 866554-53-2 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

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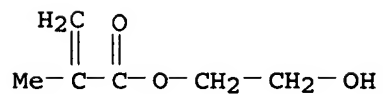
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CRN 868-77-9

CMF C6 H10 O3



CM 3

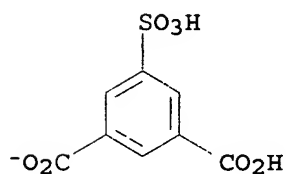
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CMF C15 H24 N . C8 H5 O7 S

CM 4

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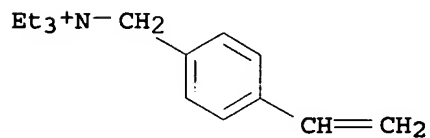
CMF C8 H5 O7 S



CM 5

CRN 62858-92-8

CMF C15 H24 N



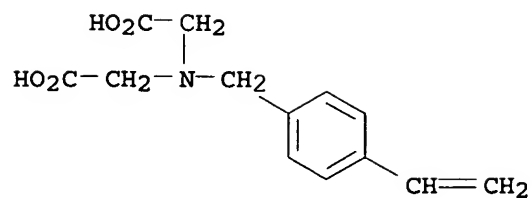
RN 866554-54-3 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

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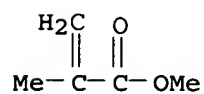
CMF C13 H15 N O4



CM 2

CRN 80-62-6

CMF C5 H8 O2



CM 3

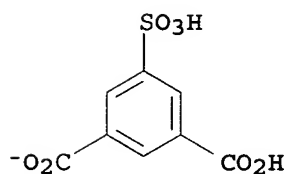
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CMF C15 H24 N . C8 H5 O7 S

CM 4

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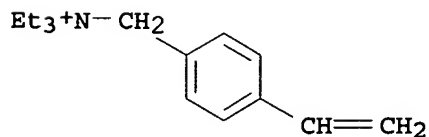
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CM 5

CRN 62858-92-8

CMF C15 H24 N



IC ICM G03F007-11

ICS G03F007-00

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

- IT **Lithographic plates**
 (pos.-working precursors; IR-sensitive lithog.
 printing plate precursors)
- IT 636-78-2D, 4-Sulfobenzoic acid, potassium monosalt 7800-91-1
 51241-16-8, Triethyl(vinylbenzyl)ammonium chloride
 (intermediate layer of IR-sensitive lithog. printing
 plate precursors)
- IT 866462-77-3P 866554-51-0P
 (intermediate layer of IR-sensitive lithog. printing
 plate precursors)
- IT 866462-78-4P 866462-79-5P 866462-80-8P
 866554-52-1P 866554-53-2P 866554-54-3P
 (intermediate layer of IR-sensitive lithog. printing
 plate precursors)

L29 ANSWER 3 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:1074611 HCAPLUS

DOCUMENT NUMBER: 143:336366

TITLE: Positive working presensitized
 lithographic plates having long
 service life and chemical resistance

INVENTOR(S): Nakamura, Ippei; Takahashi, Miki; Kawachi,
 Ikuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005274607	A2	20051006	JP 2004-83528	2004 0322
PRIORITY APPLN. INFO.:			JP 2004-83528	2004 0322

AB The plates have, on supports, IR laser-sensitive pos.-imaging
 multilayers via internal layers containing polymers which have
 sidechains YNR1R2CO2H (R1 = H, hydrocarbyl; R2 = bivalent
 hydrocarbylene; Y = group bridging the group to the polymer
 skeleton), where the imaging layers adjacent to the internal
 layers possess phenolic OH-bearing polymers.

IT **865366-31-0**
 (internal layers; long-life pos. PS plates possessing
 interlayer bonding between imaging layers and internal layers)

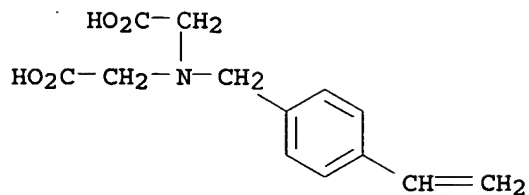
RN 865366-31-0 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer
 with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and
 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

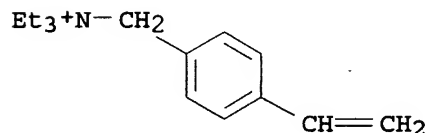
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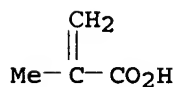
CMF C15 H24 N . Cl

● Cl⁻

CM 3

CRN 79-41-4

CMF C4 H6 O2



IC ICM G03F007-11

ICS G03F007-00; G03F007-004; G03F007-095

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST presensitized lithog plate chem resistance service life;
multilayer pos imaging PS plate IR platemaking; interlayer bonding
multilayer PS plate durability

IT Lithographic plates

(presensitized; long-life pos. PS plates possessing interlayer
bonding between imaging layers and internal layers)

IT 865366-31-0 865366-33-2 865366-34-3

(internal layers; long-life pos. PS plates possessing
interlayer bonding between imaging layers and internal layers)

L29 ANSWER 4 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:1049902 HCAPLUS

DOCUMENT NUMBER: 143:356641

TITLE: Image-forming process, lithographic printing plate, and lithographic process

INVENTOR(S): Hoshi, Satoshi; Sunagawa, Hiroshi; Inno, Toshifumi; Makino, Naonori; Kumada, Gaku; Aoshima, Norio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: PCT Int. Appl., 118 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005091068	A1	20050929	WO 2005-JP6200	2005 0324

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2005309417	A2	20051104	JP 2005-86948	2005 0324
PRIORITY APPLN. INFO.:			JP 2004-86216	A 2004 0324
			JP 2004-86217	A 2004 0324
			JP 2004-89828	A 2004 0325

AB The disclosed image-forming process includes a step of 250-420 nm laser radiation image-wise exposure of a photosensitive plate comprising a support and an image-recording layer which contains (A) a polymerization initiator, (B) a polymerizable compound, and (C) a binder polymer at the drawing time per pixel ≤ 1 ms. Also disclosed are photosensitive plates containing (D) a compound having both a polymerizable group and a group which bond with the support or (F) a filler in the image-recording layer in addition to the above A-C component, and a lithog. process involving on-press development.

IT 865764-00-7

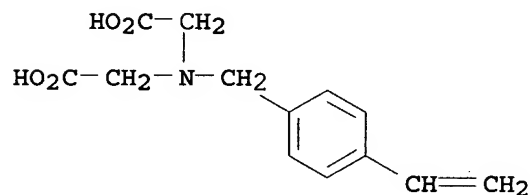
(photosensitive resin composition for laser drawing type presensitized lithog. plate)

RN 865764-00-7 HCAPLUS
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

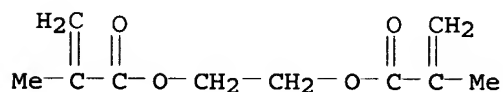
CMF C13 H15 N O4



CM 2

CRN 97-90-5

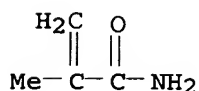
CMF C10 H14 O4



CM 3

CRN 79-39-0

CMF C4 H7 N O



IC ICM G03F007-00
 ICS G03F007-004; G03F007-027; G03F007-20; B41N001-14
 CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
 ST laser drawing presensitized **lithog** plate
 IT **Lithographic** plates
 (presensitized; photosensitive resin compns. for laser drawing type)
 IT 35705-94-3
 (photosensitive resin composition for laser drawing type presensitized **lithog.** plate)
 IT 4986-89-4, Tetramethylolmethane tetraacrylate 40220-08-4, M 315
 83176-82-3 90216-38-9 808750-44-9 865755-83-5
 865764-00-7
 (photosensitive resin composition for laser drawing type presensitized **lithog.** plate)

IT 86-39-5 90-94-8 119-61-9, uses 3584-23-4 66003-76-7
 83846-85-9 119313-12-1 125407-19-4 127820-39-7 137909-39-8
 253585-83-0 377780-83-1
 (polymerization initiator for laser-drawing type presensitized
 lithog. plates)

IT 574-93-6, Phthalocyanine 603-48-5, Leuco crystal violet
 1499-10-1 29512-49-0, 3-(Diethylamino)-6-methyl-7-anilino-fluoran
 82799-44-8 113739-12-1 865755-81-3 865755-82-4
 (sensitizer for laser-drawing type presensitized lithog
 . plates)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L29 ANSWER 5 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:1026295 HCAPLUS
 DOCUMENT NUMBER: 143:336310
 TITLE: Lithographic printing process
 INVENTOR(S): Makino, Naonori; Inno, Toshifumi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: U.S. Pat. Appl. Publ., 27 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005204943	A1	20050922	US 2005-81677	2005 0317
JP 2005262755	A2	20050929	JP 2004-81226	2004 0319
PRIORITY APPLN. INFO.:			JP 2004-81226	A 2004 0319

AB A lithog. printing process comprises the steps of:
 imagewise scanning with a laser a presensitized lithog.
 plate which comprises a hydrophilic support and an image-recording
 layer containing a polymerization initiator, an ethylenically unsatd.
 polymerizable compound having no adherence to the hydrophilic
 support, and an ethylenically unsatd. polymerizable compound having
 adherence to the hydrophilic support and a mol. structure
 comprising a polyoxyalkylene group to polymerize the ethylenically
 unsatd. polymerizable compds. within the exposed area; removing
 the image-recording layer within the unexposed area from the
 lithog. plate mounted on a cylinder of a printing press;
 and then printing an image with the lithog. plate
 mounted on the cylinder of the printing press. A presensitized
 lithog. plate is also disclosed.

IT 865060-87-3P
 (image recording layer; lithog. printing process
 containing)

RN 865060-87-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), $\alpha, \alpha', \alpha''$ -[(2,4,6-
 trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triy1)tri-2,1-

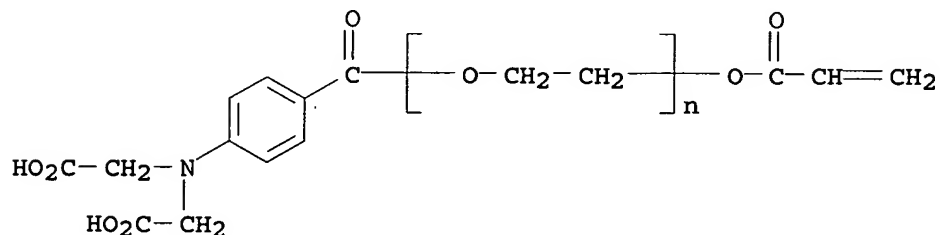
ethanediyl]tris[ω-[(1-oxo-2-propenyl)oxy]-, polymer with
 α-[4-[bis(carboxymethyl)amino]benzoyl]-ω-[(1-oxo-2-
 propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 865060-86-2

CMF (C2 H4 O)_n C14 H13 N O7

CCI PMS



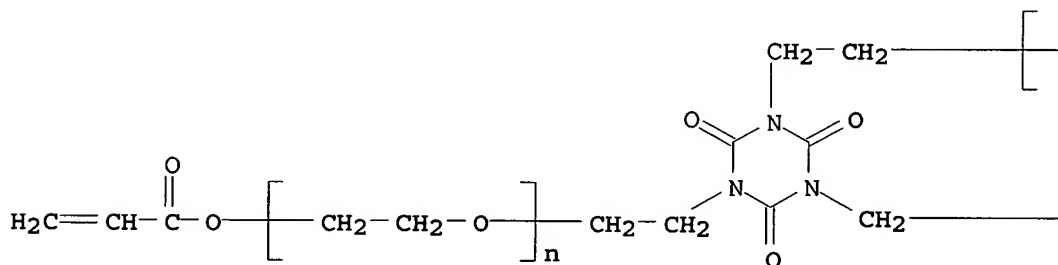
CM 2

CRN 100844-79-9

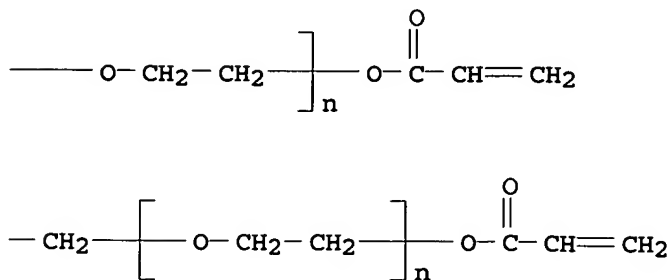
CMF (C2 H4 O)_n (C2 H4 O)_n (C2 H4 O)_n C18 H21 N3 O9

CCI PMS

PAGE 1-A



PAGE 1-B



IC ICM G03C001-492

INCL 101457000; 430270100

CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38
 ST lithog printing process image recording layer
 IT Optical materials
 (IR absorbers; lithog. printing process containing)
 IT IR materials
 (absorbers; lithog. printing process containing)
 IT Lithographic plates
 (lithog. printing process)
 IT 26873-70-1P 151653-09-7P 155915-01-8P 865060-80-6P
 865060-81-7P 865060-82-8P 865060-84-0P 865060-85-1P
 865060-87-3P 865060-88-4P 865060-90-8P
 (image recording layer; lithog. printing process
 containing)

L29 ANSWER 6 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:960457 HCAPLUS

DOCUMENT NUMBER: 143:257094

TITLE: Photopolymerizable composition containing
 binder polymer having carboxylic acid group
 and lithographic printing master
 plate with high sensitivity to laser beam

INVENTOR(S): Sugasaki, Atsushi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 94 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005234385	A2	20050902	JP 2004-45303	2004 0220
PRIORITY APPLN. INFO.:			JP 2004-45303	2004 0220

AB Disclosed is a photopolymerizable composition comprising a binder
 polymer [CH-CR1(C(:O)-A-R2-(COOH)n)] (R11 = H, Me; R2 = bonding
 group with total atom number 2-82; A = O, etc.; R3 = H, C1-10
 monovalent hydrocarbon; and n = 1-5), a sensitizing dye having the
 maximum absorption at 300-600 nm, a polymerization initiator, and a
 polymerizable compound

IT 863495-84-5

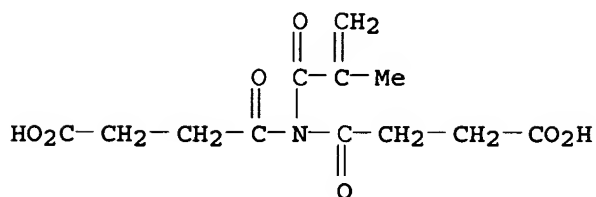
(binder polymer; photopolymerizable composition containing binder
 polymer having carboxylic acid group for lithog.
 printing master plate)

RN 863495-84-5 HCAPLUS

CN Pentanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]
 ester, polymer with butyl 2-methyl-2-propenoate and
 4,4'-[(2-methyl-1-oxo-2-propenyl)imino]bis[4-oxobutanoic acid]
 (9CI) (CA INDEX NAME)

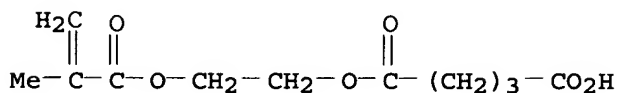
CM 1

CRN 863495-83-4
CMF C12 H15 N O7



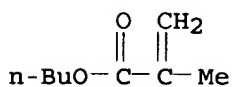
CM 2

CRN 64680-77-9
CMF C11 H16 O6



CM 3

CRN 97-88-1
CMF C8 H14 O2



- IC ICM G03F007-033
ICS C08F220-10; C08F220-54; G03F007-00; G03F007-004
- CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38
- ST photopolymerizable compn binder polymer carboxylic acid
lithog printing plate
- IT **Lithographic** plates
Photoimaging materials
(photopolymerizable composition containing binder polymer having carboxylic acid group for **lithog.** printing master plate)
- IT 93441-11-3 676349-36-3 709037-26-3 791625-79-1 863495-66-3
863495-67-4 863495-68-5 863495-69-6 863495-71-0
863495-72-1 863495-73-2 863495-74-3 863495-75-4
863495-76-5 863495-77-6 863495-78-7 863495-80-1
863495-81-2 863495-82-3 **863495-84-5** 863495-85-6
863495-86-7
(binder polymer; photopolymerizable composition containing binder polymer having carboxylic acid group for **lithog.** printing master plate)
- IT 29570-58-9 64401-02-1 77001-81-1
(photopolymerizable composition containing binder polymer having

carboxylic acid group for lithog. printing master plate)

IT 1707-68-2 24504-22-1 120307-06-4 246540-24-9 253585-83-0
676349-80-7

(polymerization initiator; photopolymerizable composition containing binder polymer having carboxylic acid group for lithog. printing master plate)

IT 118234-40-5 293329-34-7 506426-96-6 863495-87-8
(sensitizing dye; photopolymerizable composition containing binder polymer having carboxylic acid group for lithog. printing master plate)

L29 ANSWER 7 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:732076 HCAPLUS

DOCUMENT NUMBER: 143:219471

TITLE: Manufacture of lithographic printing plate using heat treatment after the development

INVENTOR(S): Hatanaka, Yusuke; Nakamura, Ippei, Watanabe, Kotaro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005215651	A2	20050811	JP 2004-26016	2004 0202

PRIORITY APPLN. INFO.: JP 2004-26016

2004
0202

AB Disclosed is a process for manufacturing a lithog. printing plate made from a polymer having phenolic OH and an IR absorber, wherein the lithog. printing plate is heat-treated after the exposure and the development, thereby forming a crosslinked structure.

IT 761445-20-9
(Manufacture of lithog. printing plate using heat treatment after development)

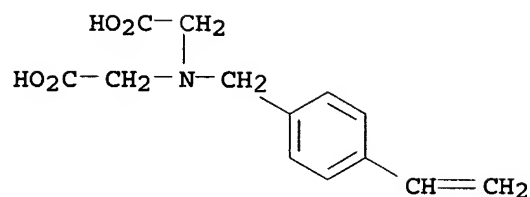
RN 761445-20-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

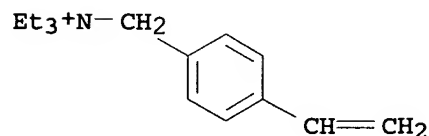
CMF C13 H15 N O4



CM 2

CRN 14350-43-7

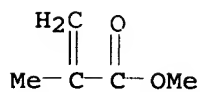
CMF C15 H24 N . Cl

● Cl⁻

CM 3

CRN 80-62-6

CMF C5 H8 O2



- IC ICM G03F007-40
ICS G03F007-00; G03F007-004; G03F007-032
- CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38
- ST IR sensitive **lithog** printing plate heat treatment polymer
- IT Heat treatment
Lithographic plates
(Manufacture of **lithog.** printing plate using heat treatment after development)
- IT Aminoplasts
(Manufacture of **lithog.** printing plate using heat treatment after development)
- IT 220227-02-1 **761445-20-9** 862370-85-2 862370-87-4
(Manufacture of **lithog.** printing plate using heat treatment after development)
- IT 9003-08-1, Cymel 300 162846-57-3
(crosslinker; Manufacture of **lithog.** printing plate using

heat treatment after development)

L29 ANSWER 8 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:610892 HCAPLUS

DOCUMENT NUMBER: 143:142783

TITLE: **Lithographic** printing master plate
having specific carbon/aluminum ratio in
anodized film and **lithographic**
printing method

INVENTOR(S): Makino, Naonori; Inno, Norifumi; Hotta,
Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 76 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005186505	A2	20050714	JP 2003-432323	2003 1226

PRIORITY APPLN. INFO.:

JP 2003-432323

2003
1226

AB Disclosed is a **lithog.** printing master plate comprising
an Al support, an anodized film, and a recording layer, wherein
the fracture surface of the anodized film after forming the
recording layer thereon has a C/Al ratio ≤ 1.0 . Between the
support and the recording layer, an underlayer containing a
hydrophilic copolymer is interposed.

IT 849467-49-8

(**lithog.** printing master plate containing hydrophilic
copolymer underlayer)

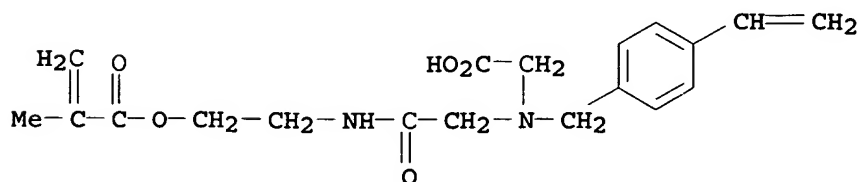
RN 849467-49-8 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer
with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]ami
no]ethyl 2-methyl-2-propenoate and N-(1-methylethyl)-2-propenamide
(9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

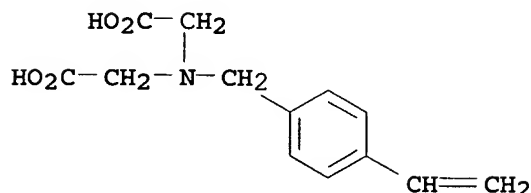
CMF C19 H24 N2 O5



CM 2

CRN 46917-20-8

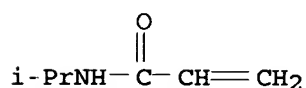
CMF C13 H15 N O4



CM 3

CRN 2210-25-5

CMF C6 H11 N O



IC ICM B41N003-03

ICS B41N001-14; G03F007-00; G03F007-038; G03F007-09; G03F007-11

CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38

ST **lithog** printing plate carbon aluminum ratio anodized
 film; hydrophilic copolymer underlayer

IT **Lithographic** plates

(**lithog.** printing master plate having specific
 carbon/aluminum ratio in anodized film)

IT 79062-71-8 83176-82-3 494228-73-8 849467-45-4
 849467-49-8 857906-53-7 857906-54-8 857906-55-9
 858125-27-6 858125-28-7 858125-29-8 858125-30-1

(**lithog.** printing master plate containing hydrophilic
 copolymer underlayer)

IT 1344-28-1, Alumina, uses 7429-90-5, Aluminum, uses
 (**lithog.** printing master plate having specific
 carbon/aluminum ratio in anodized film)

IT 7440-44-0, Carbon, uses
 (**lithog.** printing master plate having specific
 carbon/aluminum ratio in anodized film)

L29 ANSWER 9 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:608856 HCAPLUS

DOCUMENT NUMBER: 143:123075

TITLE: **Lithography** printing plate support
 having copolymer capable of interacting with
 the support and **lithography** printing
 master plate

INVENTOR(S): Makino, Naonori; Inno, Norifumi; Hotta,
 Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.

DOCUMENT TYPE: CODEN: JKXXAF
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 Japanese
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005186504	A2	20050714	JP 2003-432321	2003 1226

PRIORITY APPLN. INFO.: JP 2003-432321
 2003
 1226

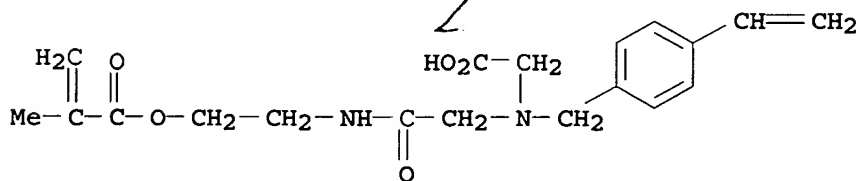
AB Disclosed is lithog. printing plate support comprising an image recording layer on a hydrophilic support, wherein the image-recording layer or other layers such as a underlayer on the support contains (a) a repeating unit having ≥ 1 ethylenic unsatd. bond (b) a copolymer having a repeating unit capable of interacting with the support surface. The copolymer has a hydrophilic group therein.

IT 849467-50-1
 (lithog. printing plate support having copolymer capable of interacting with aluminum support)

RN 849467-50-1 HCAPLUS
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

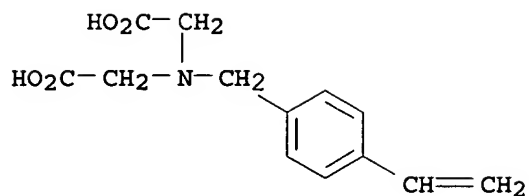
CM 1

CRN 849467-47-6
 CMF C19 H24 N2 O5



CM 2

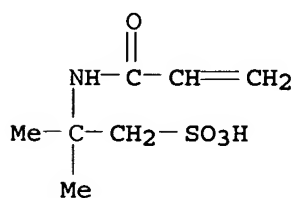
CRN 46917-20-8
 CMF C13 H15 N O4



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

- IC ICM B41N001-08
ICS C23C022-34; C23C022-83; C25D011-18; G03F007-00; G03F007-038;
G03F007-09; G03F007-11
- CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
- ST **lithog** printing master plate support hydrophilic
copolymer
- IT **Lithographic** plates
(**lithog.** printing plate support having copolymer
capable of interacting with aluminum support)
- IT 79062-71-8 849467-39-6 849467-45-4 **849467-50-1**
857906-53-7 857906-54-8 857906-55-9
(**lithog.** printing plate support having copolymer
capable of interacting with aluminum support)
- IT 1344-09-8, Sodium silicate 6834-92-0 7681-49-4, Sodium
fluoride, uses 7783-48-4, Strontium difluoride 13871-10-8,
Sodium pentafluorozirconate(IV)
(**lithog.** printing plate support processed by)
- IT 7429-90-5, Aluminum, processes
(support; **lithog.** printing plate support having
copolymer capable of interacting with aluminum support)

L29 ANSWER 10 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:303261 HCAPLUS

DOCUMENT NUMBER: 142:382218

TITLE: **Lithographic** printing plate
precursor and **lithographic** printing
method

INVENTOR(S): Makino, Naonori; Inno, Toshifumi; Yamasaki,

PATENT ASSIGNEE(S): Sumiaki
 SOURCE: Japan
 U.S. Pat. Appl. Publ., 35 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005074692	A1	20050407	US 2004-951700	2004 0929
JP 2005125749	A2	20050519	JP 2004-265735	2004 0913
PRIORITY APPLN. INFO.:			JP 2003-339391	A 2003 0930

AB A lithog. printing plate precursor comprises: a support;
 and at least one layer comprising an image-recording layer, the
 image-recording layer comprising (A) an IR absorber, (B) a polymerization
 initiator, (C) a polymerizable compound, and (D) a binder polymer,
 wherein the image recording layer is capable of being removed with
 at least one of a printing ink and a fountain solution, wherein at
 least one of said at least one layer comprises a copolymer having
 (a1) a unit comprising at least one ethylenically unsatd. bond,
 and (a2) a unit comprising at least one functional group
 interacting with a surface of the support. And a lithog
 . printing method in which the lithog. printing plate
 precursor is used. The copolymer preferably has a hydrophilic
 segment. The copolymer preferably is contained in an undercoat
 layer formed between the support and the image-recording layer..

IT 194715-96-3P 849467-41-0P 849467-48-7P
 849467-49-8P 849467-50-1P

(lithog. printing plate precursor containing)

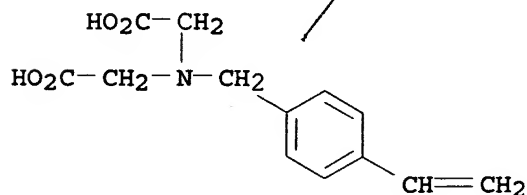
RN 194715-96-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer
 with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX
 NAME)

CM 1

CRN 46917-20-8

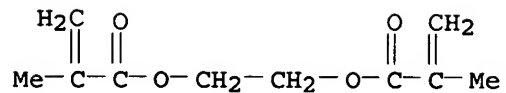
CMF C13 H15 N O4



CM 2

CRN 97-90-5

CMF C10 H14 O4



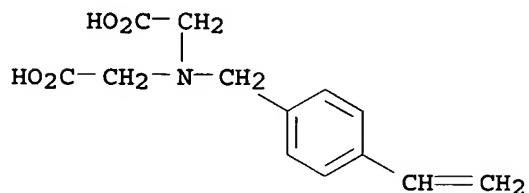
RN 849467-41-0 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI)
(CA INDEX NAME)

CM 1

CRN 68517-06-6

CMF C13 H15 N O4 . 2 Na

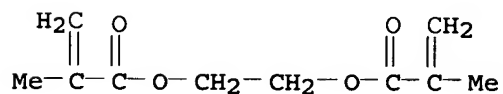


● 2 Na

CM 2

CRN 97-90-5

CMF C10 H14 O4



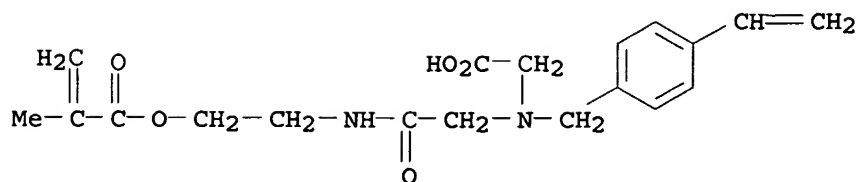
RN 849467-48-7 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

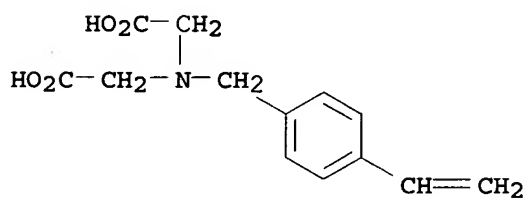
CMF C19 H24 N2 O5



CM 2

CRN 68517-06-6

CMF C13 H15 N O4 . 2 Na



● 2 Na

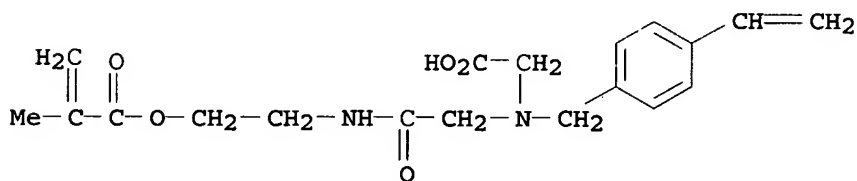
RN 849467-49-8 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate and N-(1-methylethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

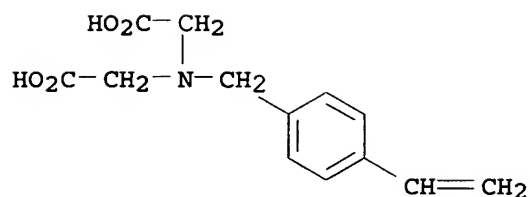
CMF C19 H24 N2 O5



CM 2

CRN 46917-20-8

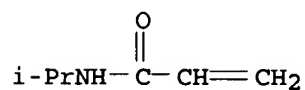
CMF C13 H15 N O4



CM 3

CRN 2210-25-5

CMF C6 H11 N O



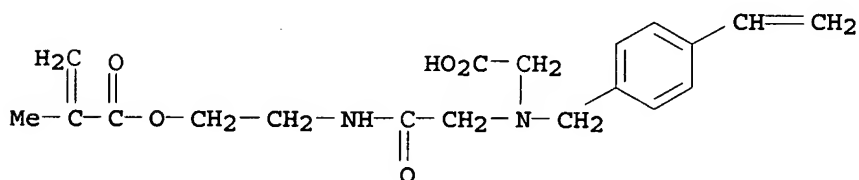
RN 849467-50-1 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

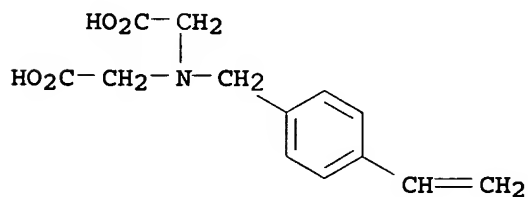
CMF C19 H24 N2 O5



CM 2

CRN 46917-20-8

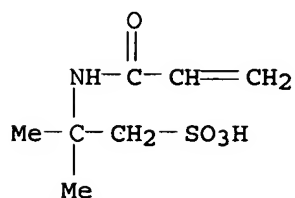
CMF C13 H15 N O4



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM G03C001-76

INCL 430270100

CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

ST lithog printing plate precursor

IT Optical materials
 (IR absorbers; lithog. printing plate precursor and
 lithog. printing method)

IT IR materials
 (absorbers; lithog. printing plate precursor and
 lithog. printing method)

IT Lithographic plates
 (lithog. printing plate precursor and lithog
 . printing method)

IT 83176-82-3P 93441-11-3P 194715-96-3P 849467-38-5P
 849467-39-6P 849467-40-9P 849467-41-0P 849467-43-2P
 849467-44-3P 849467-45-4P 849467-46-5P 849467-48-7P
 849467-49-8P 849467-50-1P 849467-51-2P
 849467-52-3P 849467-53-4P 849467-54-5P 849467-55-6P
 (lithog. printing plate precursor containing)

L29 ANSWER 11 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:209588 HCAPLUS

DOCUMENT NUMBER: 142:287840

TITLE: Image recording material and
planographic printing plate

INVENTOR(S): Kawauchi, Ikuo; Imai, Masako; Takahashi, Miki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 57 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 1513016	A2	20050309	EP 2004-21306	

USHA SHRESTHA EIC 1700 REM 4B28

2004
0908

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
EE, HU, PL, SK, HR

JP 2005107484 A2 20050421 JP 2004-120694

2004
0415

US 2005058936 A1 20050317 US 2004-934731

2004
0907

PRIORITY APPLN. INFO.:

JP 2003-315290

2003
0908

JP 2004-120694

2004
0415

AB The present invention provides an image recording material comprising a substrate, an intermediate layer, and a photosensitive layer containing a novolak phenolic resin and a light to heat conversion agent and being recordable with an IR laser. The intermediate layer and photosensitive layer are sequentially provided on the substrate. The intermediate layer contains a polymer having an acidic group and being capable of interacting with the novolak phenolic resin contained in the photosensitive layer. A **planog.** printing plate excellent in chemical resistance and printing durability is obtained by heat-treating the image recording material at 150 to 300° after effecting image-wise exposure with an IR laser and development.

IT 30395-28-9 761445-16-3 761445-17-4

(**planog.** printing plate containing polymer in intermediate layer)

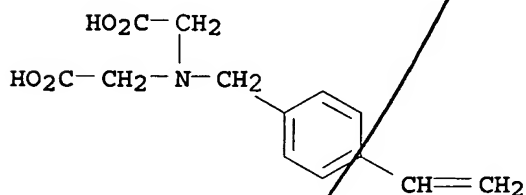
RN 30395-28-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

CMF C13 H15 N O4

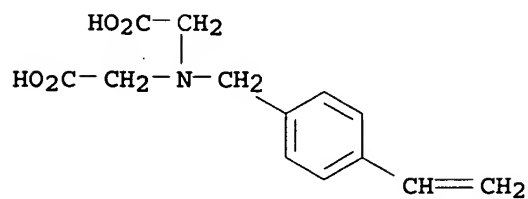


RN 761445-16-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

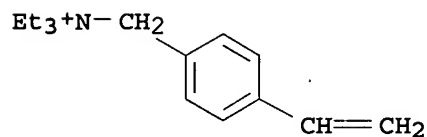
CM 1

CRN 46917-20-8
CMF C13 H15 N O4



CM 2

CRN 14350-43-7
CMF C15 H24 N . Cl

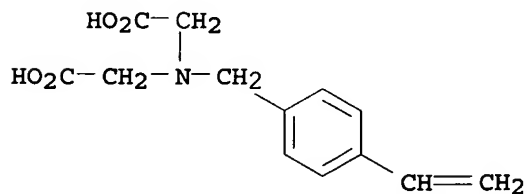


● Cl⁻

RN 761445-17-4 HCAPLUS
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

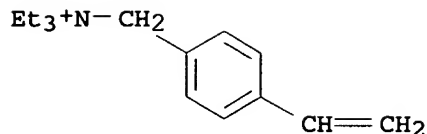
CM 1

CRN 46917-20-8
CMF C13 H15 N O4



CM 2

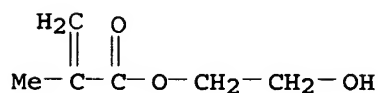
CRN 14350-43-7
CMF C15 H24 N . Cl



CM 3

CRN 868-77-9

CMF C6 H10 O3



IC ICM G03F007-11
ICS B41C001-10; B41M005-40

CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST image recording **planog** printing plate novolak phenolic
resin; heat treatment polymer intermediate layer

IT Phenolic resins, uses
(novolak; **planog**. printing plate containing polymer in
intermediate layer)

IT Heat treatment
(**planog**. printing plate containing polymer in
intermediate layer)

IT Printing plates
(**planog.**; **planog**. printing plate containing
polymer in intermediate layer)

IT 30395-28-9 220227-02-1 669013-40-5 761445-16-3
761445-17-4 847043-64-5
(**planog**. printing plate containing polymer in
intermediate layer)

L29 ANSWER 12 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:181138 HCAPLUS

DOCUMENT NUMBER: 142:287833

TITLE: Image recording material and
planographic printing plate

INVENTOR(S): Kawauchi, Ikuo; Takahashi, Miki; Imai, Masako

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1510866	A2	20050302	EP 2004-20546	2004 0830
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
EE, HU, PL, SK, HR

JP 2005099685	A2	20050414	JP 2004-120695	2004 0415
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US 2005048399	A1	20050303	US 2004-928170	2004 0830
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PRIORITY APPLN. INFO.: JP 2003-306918 A 2003
0829

JP 2004-120695 A 2004
0415

AB An image recording material of the present invention comprises an anodized aluminum support, an intermediate layer containing a polymer having a carboxylic acid group in a side chain thereof and formed on the aluminum support, and a photosensitive layer containing at least 50% or more of novolak type phenol resin and a photothermal conversion agent and recordable by IR laser beam. A **planog.** printing plate excellent in printing durability can be obtained by subjecting the image recording material imagewise to IR laser exposure treatment and to development treatment, and then heating the image recording material at 150 to 300°C.

IT 30395-28-9 761445-17-4 847043-66-7
(resin; image recording material for **planog.** printing plate containing)

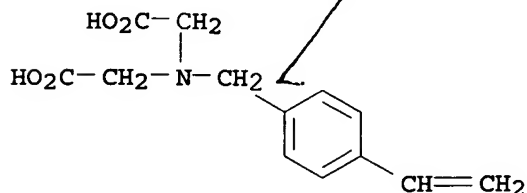
RN 30395-28-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

CMF C13 H15 N O4



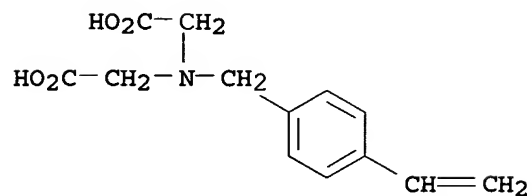
RN 761445-17-4 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

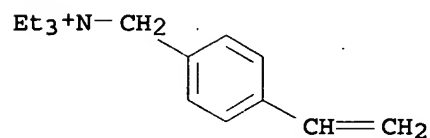
CMF C13 H15 N O4



CM 2

CRN 14350-43-7

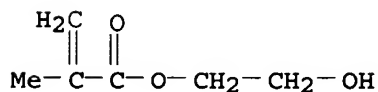
CMF C15 H24 N . Cl

● Cl⁻

CM 3

CRN 868-77-9

CMF C6 H10 O3



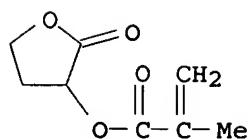
RN 847043-66-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]glycine and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 195000-66-9

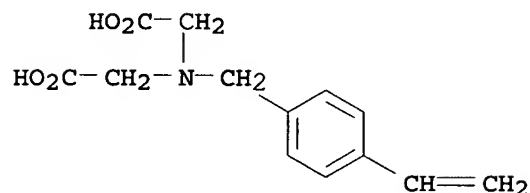
CMF C8 H10 O4



CM 2

CRN 46917-20-8

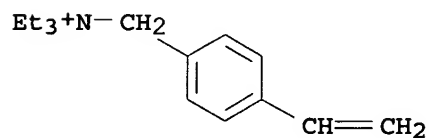
CMF C13 H15 N O4



CM 3

CRN 14350-43-7

CMF C15 H24 N . Cl

● Cl⁻

IC ICM G03F007-11
 ICS B41C001-10; B41N001-08; B41N001-14; B41M005-36
 CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38
 ST image recording material **planog** printing plate
 IT Printing plates
 (planog.; image recording material and planog
 . printing plate)
 IT 30395-28-9 220227-02-1 761445-17-4
 847043-64-5 847043-65-6 847043-66-7
 (resin; image recording material for **planog**. printing
 plate containing)

L29 ANSWER 13 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:98290 HCAPLUS
 DOCUMENT NUMBER: 142:186587

TITLE: Positive-working presensitized
lithographic plates for heat-mode
laser platemaking

INVENTOR(S): Kawauchi, Ikuo; Takahashi, Miki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005031539	A2	20050203	JP 2003-272809	2003 0710

PRIORITY APPLN. INFO.:

JP 2003-272809

2003
0710

AB The plates have, on supports, sequential layers of lactone-bearing polymer interlayers and recording layers containing alkali-soluble resins, novolaks, and photothermal converters.

IT 832730-91-3

(interlayers; pos. lithog. plates having
lactone-containing polymer interlayers and photothermal
converter-containing recording layers)

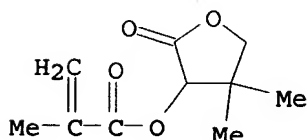
RN 832730-91-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer
with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and
tetrahydro-4,4-dimethyl-2-oxo-3-furanyl 2-methyl-2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 156938-13-5

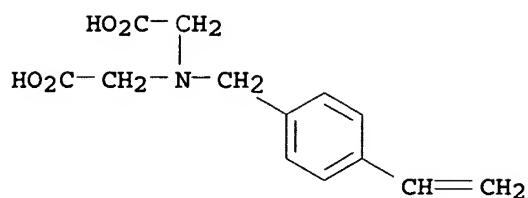
CMF C10 H14 O4



CM 2

CRN 46917-20-8

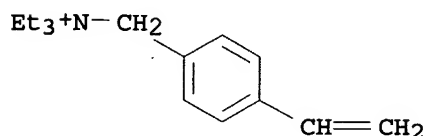
CMF C13 H15 N O4



CM 3

CRN 14350-43-7

CMF C15 H24 N . Cl

● Cl⁻

- IC ICM G03F007-00
ICS G03F007-004; G03F007-032; G03F007-11
- CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38
- ST pos **lithog** plate laser IR sensitivity; printing durability lactone resin interlayer **lithog** plate; IR laser direct platemaking sensitivity **lithog**
- IT Phenolic resins, uses
(novolak, cresol-based, recording layers; pos. **lithog** . plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)
- IT Phenolic resins, uses
(novolak, recording layers; pos. **lithog**. plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)
- IT **Lithographic** plates
(presensitized; pos. **lithog**. plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)
- IT 669013-38-1 669013-40-5 832730-88-8 832730-89-9
832730-90-2 832730-91-3 832743-68-7 832743-70-1
(interlayers; pos. **lithog**. plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)
- IT 134127-48-3
(photothermal converters, recording layers; pos. **lithog** . plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)
- IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
175221-27-9, Ethyl methacrylate-isobutyl methacrylate-methacrylic

acid copolymer

(recording layers; pos. lithog. plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)

IT 12780-24-4 37321-70-3, JIS A 1050
(supports; pos. lithog. plates having lactone-containing polymer interlayers and photothermal converter-containing recording layers)

L29 ANSWER 14 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:780219 HCAPLUS

DOCUMENT NUMBER: 141:304302

TITLE: Planographic printing plate precursor

INVENTOR(S): Takahashi, Miki; Sasaki, Hidehito; Hotta, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 34 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 2004185375	A1	20040923	US 2004-803999	2004 0319
JP 2005157246	A2	20050616	JP 2004-73073	2004 0315
CN 1532051	A	20040929	CN 2004-10030230	2004 0322
PRIORITY APPLN. INFO.:			JP 2003-78699	A 2003 0320
			JP 2003-374189	A 2003 1104

AB The present invention provides a planog. printing plate precursor having an intermediate layer containing a polymer having a structure represented by the formula YR₁NR₂-COOH (Y = connecting group connected with main chain of polymer; R₁ = hydrogen atom or hydrocarbon group; and R₂ = divalent hydrocarbon group.) at its side chain and an IR laser photosensitive pos. recording layer, disposed on a support in this order.

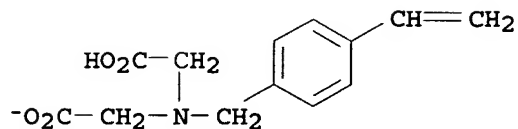
IT 761445-14-1 761445-15-2 761445-16-3
761445-17-4 761445-18-5 761445-20-9
(planog. printing plate containing polymer in intermediate layer)

RN 761445-14-1 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, ion(1-), N,N,N-triethylethanaminium (9CI) (CA INDEX NAME)

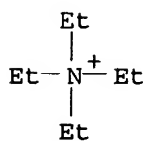
CM 1

CRN 761445-13-0
CMF C13 H14 N O4



CM 2

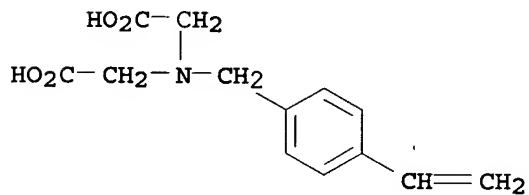
CRN 66-40-0
CMF C8 H20 N



RN 761445-15-2 HCAPLUS
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

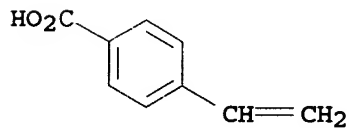
CM 1

CRN 46917-20-8
CMF C13 H15 N O4



CM 2

CRN 1075-49-6
CMF C9 H8 O2



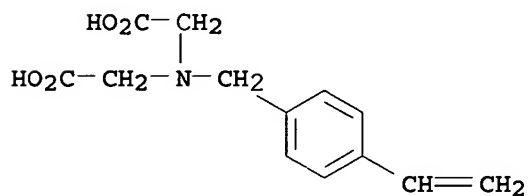
RN 761445-16-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

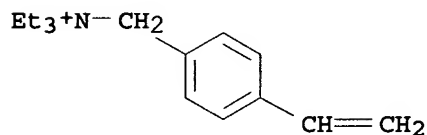
CMF C13 H15 N O4



CM 2

CRN 14350-43-7

CMF C15 H24 N . Cl



● Cl⁻

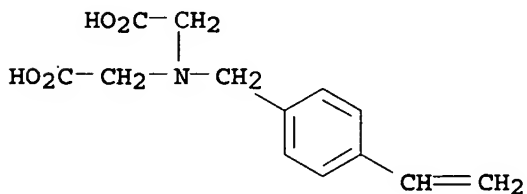
RN 761445-17-4 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

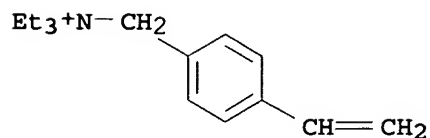
CRN 46917-20-8

CMF C13 H15 N O4



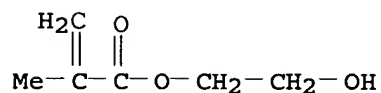
CM 2

CRN 14350-43-7
CMF C15 H24 N . Cl



CM 3

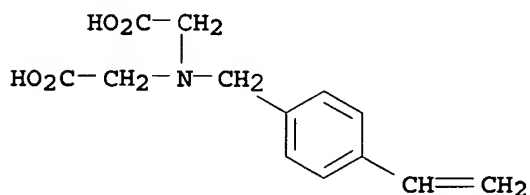
CRN 868-77-9
CMF C6 H10 O3



RN 761445-18-5 HCAPLUS
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen butanedioate (9CI) (CA INDEX NAME)

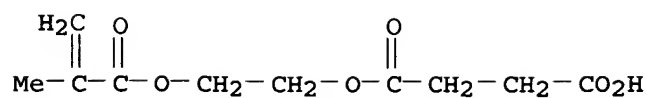
CM 1

CRN 46917-20-8
CMF C13 H15 N O4



CM 2

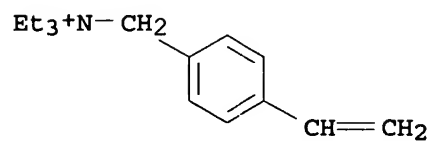
CRN 20882-04-6
CMF C10 H14 O6



CM 3

CRN 14350-43-7

CMF C15 H24 N . Cl

● Cl⁻

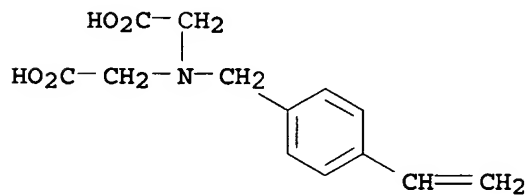
RN 761445-20-9 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8

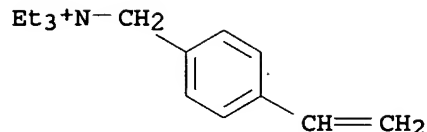
CMF C13 H15 N O4



CM 2

CRN 14350-43-7

CMF C15 H24 N . Cl

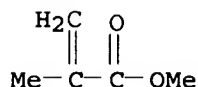


● Cl⁻

CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM G03C001-73

INCL 430300000

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST **planog** printing plate precursor polymer

IT Printing plates
(**planog.**; **planog.** printing plate containing
polymer in intermediate layer)

IT 761445-14-1 761445-15-2 761445-16-3

761445-17-4 761445-18-5 761445-20-9

(**planog.** printing plate containing polymer in
intermediate layer)

L29 ANSWER 15 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:557316 HCAPLUS

DOCUMENT NUMBER: 139:250177

TITLE: Methods for the topographical patterning and
patterned surface modification of hydrogels
based on hydroxyethyl methacrylate

AUTHOR(S): Yu, Tianyue; Ober, Christopher K.

CORPORATE SOURCE: Materials Science and Engineering, Cornell
University, Ithaca, NY, 14850, USA

SOURCE: Biomacromolecules (2003), 4(5), 1126-1131

CODEN: BOMAF6; ISSN: 1525-7797

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

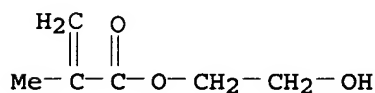
AB Hydrogels have gained broad acceptance as a class of biocompatible materials. In this paper, we report the topog. patterning and regiospecific functionalization of hydrogel surfaces. Both photolithog. and soft lithog. are combined in a hybrid process to form these topog. features. By functionalization of a base layer surface followed by lithog. patterning steps, it is possible to introduce chemical functions to specific regions of

the patterned surface. The model systems investigated were based on 2-hydroxyethyl methacrylate (HEMA), which is well-known for its low toxicity and widespread use in biomedical applications. Tests of Ni-NTA modified hydrogel surfaces showed successful binding of fluorescently labeled proteins to selected regions of the patterned hydrogel surface. These processes can be expanded to a wide range of monomer systems.

IT 597578-16-0P, Ethylene glycol dimethacrylate-2-Hydroxyethyl methacrylate-nitrilotriacetic acid copolymer (topog. patterning and patterned surface modification of hydrogels based on hydroxyethyl methacrylate)
 RN 597578-16-0 HCAPLUS
 CN Glycine, N,N-bis(carboxymethyl)-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

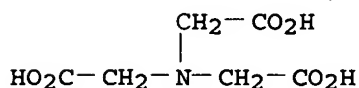
CM 1

CRN 868-77-9
 CMF C6 H10 O3



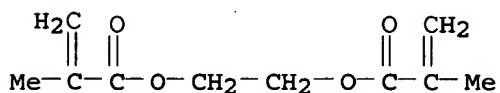
CM 2

CRN 139-13-9
 CMF C6 H9 N O6



CM 3

CRN 97-90-5
 CMF C10 H14 O4



CC 63-7 (Pharmaceuticals)

IT **Lithography**
 (soft-; topog. patterning and patterned surface modification of hydrogels based on hydroxyethyl methacrylate)
 IT 597578-16-0P, Ethylene glycol dimethacrylate-2-Hydroxyethyl methacrylate-nitrilotriacetic acid copolymer (topog. patterning and patterned surface modification of hydrogels based on hydroxyethyl methacrylate)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L29 ANSWER 16 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:586455 HCAPLUS
 DOCUMENT NUMBER: 135:173008
 TITLE: Original plate for lithographic
 printing plate
 INVENTOR(S): Hotta, Hisashi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001219665	A2	20010814	JP 2000-30732	2000 0208

PRIORITY APPLN. INFO.: JP 2000-30732
 2000
 0208

AB The plate consists of a support, an ink sensitization layer containing photo- or heat-curable resins, and a metal- or metal compound-containing layer in this order. The surface of the top layer may be treated with silicate salts or phosphonic acids for hydrophilicity, so that soiling in printing is prevented. The plate has high interlayer adhesion, resulting in good printability.

IT 251359-49-6
 (photocurable; lithog. printing original plate having layer containing photo- or heat-curable resin and layer containing metal or metal compound)

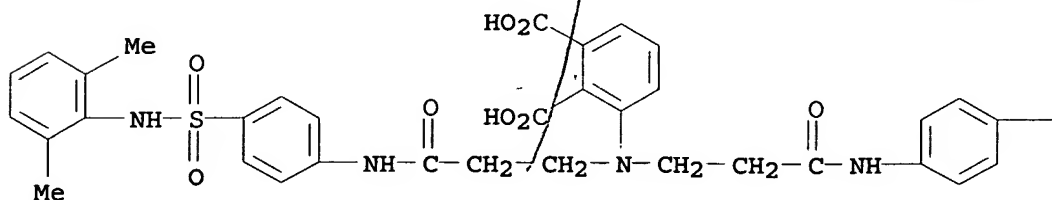
RN 251359-49-6 HCAPLUS
 CN Glycine, N-(carboxymethyl)-N-[(heptadecafluorooctyl)sulfonyl]-, polymer with 3-[bis[3-[[4-[[[(2,6-dimethylphenyl)amino]sulfonyl]phenyl]amino]-3-oxopropyl]amino]-1,2-benzenedicarboxylic acid and 1,10-decanediamine (9CI) (CA INDEX NAME)

CM 1

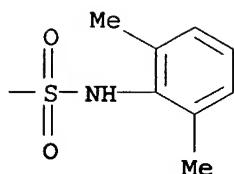
CRN 251359-48-5

CMF C42 H43 N5 O10 S2

PAGE 1-A



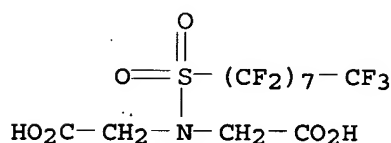
PAGE 1-B



CM 2

CRN 251359-47-4

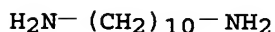
CMF C12 H6 F17 N O6 S



CM 3

CRN 646-25-3

CMF C10 H24 N2



IC ICM B41N001-14

ICS C23C022-48; G03F007-00; G03F007-11

CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)ST **lithog** printing plate ink sensitization layer; photocurable resin ink sensitization layer **lithog** plate; heat curable resin ink sensitization **lithog** plate; metal layer **lithog** printing plateIT Silicates, uses (hydrophilic treatment of top layer with; **lithog**. printing original plate having layer containing photo- or heat-curable resin and layer containing metal or metal compound)IT **Lithographic** plates (**lithog**. printing original plate having layer containing photo- or heat-curable resin and layer containing metal or metal compound)IT Phenolic resins, uses (novolak, heat-curable; **lithog**. printing original plate having layer containing photo- or heat-curable resin and layer containing metal or metal compound)

IT 162846-57-3

(crosslinker; **lithog**. printing original plate having layer containing photo- or heat-curable resin and layer containing metal or metal compound)

IT 1312-76-1, Potassium silicate 1344-09-8, Sodium silicate
27754-99-0, Poly(vinylphosphonic acid)
(hydrophilic treatment of top layer with; lithog.
printing original plate having layer containing photo- or
heat-curable resin and layer containing metal or metal compound)

IT 251359-49-6 354117-58-1
(photocurable; lithog. printing original plate having
layer containing photo- or heat-curable resin and layer containing
metal or metal compound)

IT 90216-38-9, Allyl methacrylate-methacrylic acid copolymer
(photocurable; lithog. printing original plate having
layer containing photo- or heat-curable resin and layer containing
metal or metal compound)

IT 4986-89-4, Tetramethylolmethane tetraacrylate
(photocurable; lithog. printing original plate having
layer containing photo- or heat-curable resin and layer containing
metal or metal compound)

IT 37321-70-3, AA 1050
(support; lithog. printing original plate having
layer containing photo- or heat-curable resin and layer containing
metal or metal compound)

IT 7439-89-6, Iron, uses 7440-31-5, Tin, uses 12033-89-5, Silicon
nitride, uses 13463-67-7, Titania, uses 25583-20-4, Titanium
nitride
(top layer; lithog. printing original plate having
layer containing photo- or heat-curable resin and layer containing
metal or metal compound)

L29 ANSWER 17 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:752364 HCAPLUS
DOCUMENT NUMBER: 132:17139
TITLE: Photosensitive compositions for hard image
formation
INVENTOR(S): Fujita, Kazuo; Kawamura, Koichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11327129	A2	19991126	JP 1998-126116	1998 0508
PRIORITY APPLN. INFO.:			JP 1998-126116	1998 0508

AB The compns. contain F-containing polymer surfactants having
fluorinated aliphatic groups, C₂₄ aliphatic or aromatic groups, and
acidic H-containing substituents. The compns. are useful for manufacture
of lithog. printing plates. The compns. give hard
images without decrease of sensitivity.

IT 251359-49-6P
(photosensitive compns. containing fluoropolymer surfactants for
hard image formation)

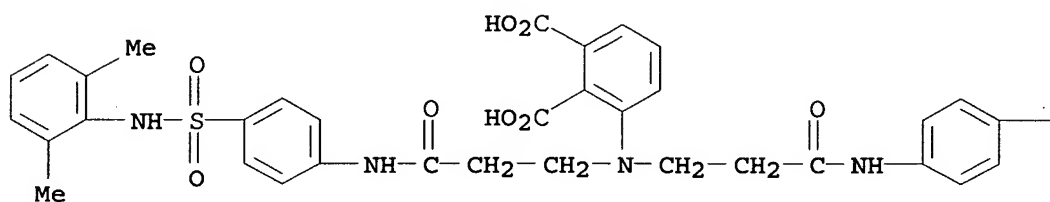
RN 251359-49-6 HCAPLUS
 CN Glycine, N-(carboxymethyl)-N-[(heptadecafluorooctyl)sulfonyl]-, polymer with 3-[bis[3-[4-[(2,6-dimethylphenyl)amino]sulfonyl]phenyl]amino]-3-oxopropyl]amino]-1,2-benzenedicarboxylic acid and 1,10-decanediamine (9CI) (CA INDEX NAME)

CM 1

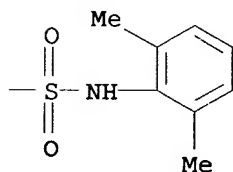
CRN 251359-48-5

CMF C42 H43 N5 O10 S2

PAGE 1-A



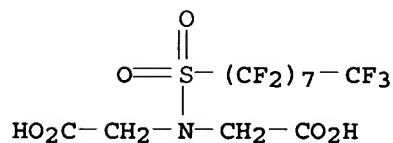
PAGE 1-B



CM 2

CRN 251359-47-4

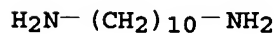
CMF C12 H6 F17 N O6 S



CM 3

CRN 646-25-3

CMF C10 H24 N2



IC ICM G03F007-004

ICS C08L101-04; C09D201-00
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 46
 ST photoresist fluoropolymer surfactant hard image formation;
 lithog plate photoresist fluoropolymer surfactant
 IT **Lithographic** plates
 Photoresists
 (photosensitive compns. containing fluoropolymer surfactants for
 hard image formation)
 IT 251359-45-2P **251359-49-6P** 251359-52-1P 251359-54-3P
 251359-57-6P
 (photosensitive compns. containing fluoropolymer surfactants for
 hard image formation)

L29 ANSWER 18 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:260845 HCAPLUS

DOCUMENT NUMBER: 130:318540

TITLE: Image formation of silver halide photographic
 material by heat development and treatment of
 heat-developed images

INVENTOR(S): Ito, Hirohide

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 11109585	A2	19990423	JP 1997-271384	

1997

1003

PRIORITY APPLN. INFO.: JP 1997-271384

1997

1003

AB Images are formed by imagewise exposing a Ag halide photog.
 material containing photosensitive Ag halide particles and a
 hydrophilic binder and heat-developing in the presence of a
 water-insol. basic metal compound, a polymer chelating agent, H₂O,
 and optionally a low-mol.-weight chelating agent. The images are
 treated by washing with H₂O and treating the H₂O with a polymer
 chelating agent. High-sensitivity and high- γ images with
 good storage stability are obtained by the method. Metal concentration
 in wastewaters decreases by the treatment.

IT 74216-84-5 223678-32-8

(heat development of photog. material and wastewater treatment
 using chelating agent)

RN 74216-84-5 HCAPLUS

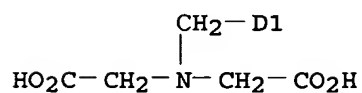
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium
 salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS

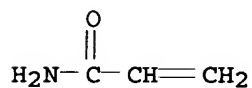
D1-CH=CH₂

●2 Na

CM 2

CRN 79-06-1

CMF C3 H5 N O



RN 223678-32-8 HCAPLUS

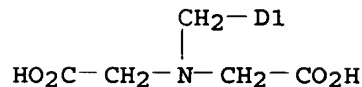
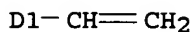
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS

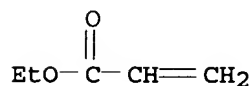


●2 Na

CM 2

CRN 140-88-5

CMF C5 H8 O2



IC ICM G03C008-32

ICS G03C008-40

CC 74-2 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 60

IT 7732-18-5, Water, uses 20427-58-1, Zinc hydroxide
74216-84-5 91150-40-2 107715-70-8, Guanidinium
picolinate 223678-32-8

(heat development of photog. material and wastewater treatment
using chelating agent)

L29 ANSWER 19 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:111891 HCAPLUS

DOCUMENT NUMBER: 130:189424

TITLE: Positive-working presensitized
lithographic plate with polymer
intermediate layer

INVENTOR(S): Tan, Shiro; Takita, Satoru; Hotta, Hisashi;
Uno, Seiji

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

JP 11038635

A2

19990212

JP 1997-195863

1997
0722

PRIORITY APPLN. INFO.:

JP 1997-195863

1997
0722

AB The title presensitized lithog. plate comprises a hydrophilized Al support coated with a pos.-working photosensitive layer through an intermediate layer containing a polymer having a repeating unit $\text{CH}_2\text{CR}_1[\text{BG}(\text{EX}')\text{DX}]$, $\text{CH}_2\text{CR}_1[\text{B}(\text{LX})\text{t}]$ or $\text{CH}_2\text{CR}_1(\text{ALXm})$ ($\text{R}_1 = \text{H}$, halo, alkyl; $\text{B} = \text{aromatic group}$; $\text{A} = \text{CO}_2$, CONH , CONMe ; $\text{G} = \text{trivalent linking group}$; D , $\text{E} = \text{single bond or divalent linking group}$; X , $\text{X}' = \text{acid group with } \text{pK}_a \leq 7 \text{ or its alkali metal salt or ammonium salt}$; $\text{t} = 2-4$; $\text{m} = 2 \text{ or } 3$). The lithog. plate shows low residual color and good printing durability, and whitening of the non-image area upon development is suppressed.

IT 83117-89-9P

(presensitized lithog. plate with intermediate layer containing polymer having acidic group)

RN 83117-89-9 HCAPLUS

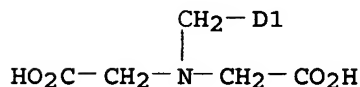
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 65405-48-3

CMF C13 H15 N O4

CCI IDS

D1-CH=CH₂

IC ICM G03F007-11

ICS G03F007-00; G03F007-039

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST presensitized lithog plate intermediate layer polymer

IT Lithographic plates

(presensitized, pos.-working; presensitized lithog. plate with intermediate layer containing polymer having acidic group)

IT 83117-89-9P

(presensitized lithog. plate with intermediate layer

containing polymer having acidic group)
 IT 60017-19-8 83825-89-2 220530-47-2 220530-53-0 220530-55-2
 220530-64-3 220530-69-8 220530-74-5 220530-76-7
 (presensitized lithog. plate with intermediate layer
 containing polymer having acidic group)
 IT 37321-70-3, AA 1050
 (support; presensitized lithog. plate with
 intermediate layer containing polymer having acidic group)

L29 ANSWER 20 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:986328 HCAPLUS

DOCUMENT NUMBER: 124:18363

TITLE: Electrophotographic color liquid developers
 providing sharp images with excellent color
 reproducibility

INVENTOR(S): Momota, Atsushi; Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 07199546	A2	19950804	JP 1993-338531	1993 1228
PRIORITY APPLN. INFO.:			JP 1993-338531	1993 1228

AB The title developers comprise colored resin particles in a nonaq.
 solvent (elec. resistivity $\geq 10^9 \Omega \cdot \text{cm}$,
 permittivity ≤ 3.5), where the particles are obtained by
 polymerizing (1) monofunctional monomer which is soluble in the solvent
 but becoming insol. upon polymerization, (2) monofunctional monomer
 containing a group selected from CO_2H , SO_3H , SO_2H , and PO_3H_2 , (3)
 monomer containing hydrocarbon group at its sidechains, and (4)
 dispersion stabilizing polymer (mol. weight 1+104-5+105)
 having $\geq 50\%$ of repeating units containing $\text{C}_{\geq 6}$ aliphatic
 group at its sidechains.

IT 171496-13-2P

(latex particles for electrophotog. color liquid developers
 comprising)

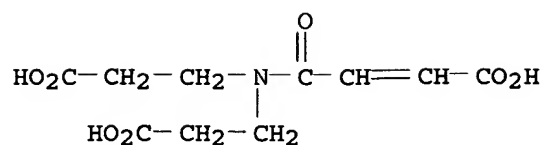
RN 171496-13-2 HCAPLUS

CN 2-Butenoic acid, 4-[bis(2-carboxyethyl)amino]-4-oxo-, polymer with
 dodecyl 2-methyl-2-propenoate, ethenyl acetate,
 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 4-[(2-methyl-1-oxo-2-
 propenyl)oxy]butanoate and octadecyl 2-methyl-2-propenoate (9CI)
 (CA INDEX NAME)

CM 1

CRN 171496-12-1

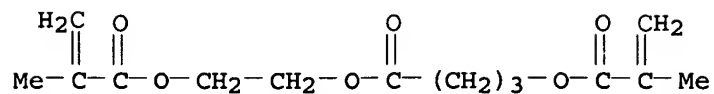
CMF C10 H13 N 07



CM 2

CRN 171495-78-6

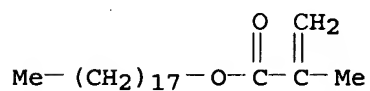
CMF C14 H20 O6



CM 3

CRN 32360-05-7

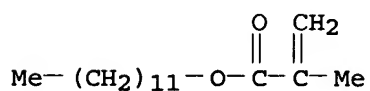
CMF C22 H42 O2



CM 4

CRN 142-90-5

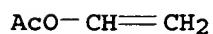
CMF C16 H30 O2



CM 5

CRN 108-05-4

CMF C4 H6 O2



IC ICM G03G009-13

ICS G03G009-12

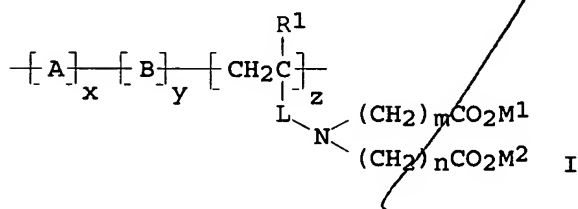
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 32517-13-8P 171495-88-8P 171495-89-9P 171495-90-2P
 171495-91-3P 171495-92-4P 171495-94-6P 171495-96-8P
 171495-98-0P 171495-99-1P 171496-01-8P 171496-02-9P

(latex particles for electrophotog. color liquid developers comprising)

PATENT INFORMATION:

GI



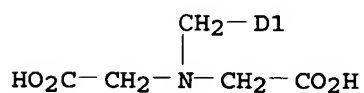
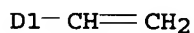
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS



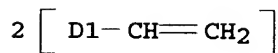
●2 Na

CM 2

CRN 1321-74-0

CMF C10 H10

CCI IDS



RN 158642-41-2 HCAPLUS

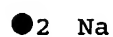
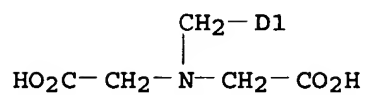
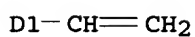
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with diethenylbenzene, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS

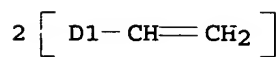


CM 2

CRN 1321-74-0

CMF C10 H10

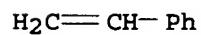
CCI IDS



CM 3

CRN 100-42-5

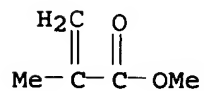
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2

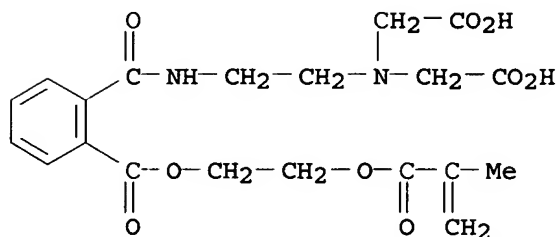


RN 158700-51-7 HCAPLUS
 CN Benzoic acid, 2-[[[2-[bis(carboxymethyl)amino]ethyl]amino]carbonyl]-, 1-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, disodium salt, polymer with diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 158700-50-6

CMF C20 H24 N2 O9 . 2 Na



● 2 Na

CM 2

CRN 1321-74-0

CMF C10 H10

CCI IDS



2 [D1-CH=CH2]

IT 158642-38-7P 158642-40-1P
 (preparation of, hydrophilic colloid layer containing, for color reversal photog. material)

RN 158642-38-7 HCAPLUS

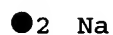
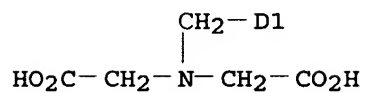
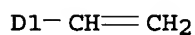
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with diethenylbenzene and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

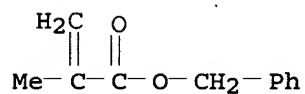
CMF C13 H15 N O4 . 2 Na

CCI IDS



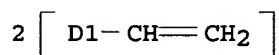
CM 2

CRN 2495-37-6
CMF C11 H12 O2



CM 3

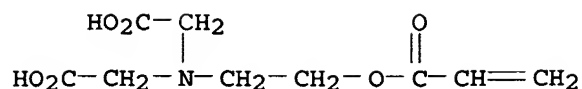
CRN 1321-74-0
CMF C10 H10
CCI IDS



RN 158642-40-1 HCAPLUS
CN 2-Propenoic acid, 2-[bis(carboxymethyl)amino]ethyl ester, disodium salt, polymer with diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 158642-39-8
CMF C9 H13 N O6 . 2 Na



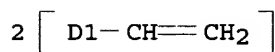
●2 Na

CM 2

CRN 1321-74-0

CMF C10 H10

CCI IDS



IC ICM G03C001-053

ICS G03C001-04

CC 74-2 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)

IT 107685-71-2 158642-41-2 158700-51-7

(hydrophilic colloid layer containing, for color reversal photog.
material)

IT 158642-38-7P 158642-40-1P

(preparation of, hydrophilic colloid layer containing, for color
reversal photog. material)

L29 ANSWER 22 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:207740 HCAPLUS

DOCUMENT NUMBER: 112:207740

TITLE: Silver halide color photographic material

INVENTOR(S): Oki, Nobutaka; Ono, Shigetoshi; Nakamura,
Yoshisada

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01197753	A2	19890809	JP 1988-22523	1988 0202

PRIORITY APPLN. INFO.:

JP 1988-22523

1988

0202

AB A Ag halide color photog. material contains ≥ 1 polymer based on $\text{CH}_2\text{:CR-SPLT-COUP(SOL)}_n$ [COUP = a coupler nucleus capable of coupling with an oxidized primary aromatic amine color developing agent; SPLT = a group released from COUP on coupling and bonded to the coupling group of COUP; SPLT is also bonded to the polymerized part; SOL = a polar group bonded to the noncoupling part of COUP and including SO_3H , CO_2H , phospho, OH, carbamoyl, sulfamoyl, sulfonamido; $n = 1-4$; $R = \text{H}$, alkyl, halo]. The occurrences of color staining and color fogging are reduced.

IT 126857-93-0

(color photog. material containing, for reduced staining and fogging)

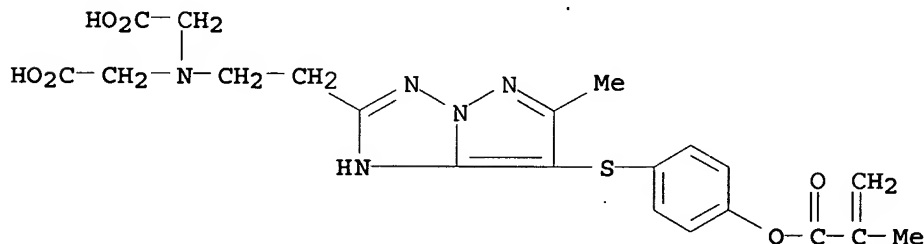
RN 126857-93-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 4-[[2-[2-bis(carboxymethyl)amino]ethyl]-6-methyl-1H-pyrazolo[1,5-b][1,2,4]triazol-7-yl]thio]phenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 126857-92-9

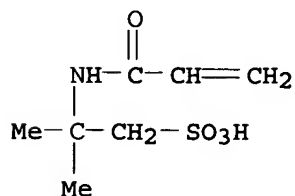
CMF C21 H23 N5 O6 S



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

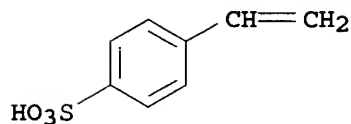


● Na

CM 3

CRN 4551-90-0

CMF C8 H8 O3 S . K



● K

IC ICM G03C007-32

ICS G03C007-26

CC 74-2 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 126857-85-0 126857-87-2 126857-89-4 126857-91-8

126857-93-0 126857-95-2 126857-97-4 126857-98-5

126857-99-6 126858-01-3 126858-03-5 126858-05-7

(color photog. material containing, for reduced staining and
fogging)

L29 ANSWER 23 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:108621 HCAPLUS

DOCUMENT NUMBER: 112:108621

TITLE: Heat-sensitive stencil paper using an urethane
type adhesiveINVENTOR(S): Okada, Yukio; Sato, Nobuyuki; Bando, Masaki;
Kadowaki, Akio; Naganami, SatoshiPATENT ASSIGNEE(S): Tokyo Printing Ink Mfg. Co., Ltd., Japan; Riso
Kagaku Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01148591	A2	19890609	JP 1987-307423	1987 1207
JP 2732575	B2	19980330	JP 1987-307423	1987 1207

PRIORITY APPLN. INFO.:

AB A heat-sensitive stencil paper is prepared by adhering a plastic film on a porous support by using an urethane type adhesive, which comprises urethane prepolymer using diisocyanates and polyether diols with an average mol. weight of 400-2000 (equivalent ratio NCO/OH =

1.5-2.0) and glycidyl type epoxy compds. having no active H at a ratio of 10:10-1 and whose flow-occurring temperature after hardening is 50-240°. The stencil paper exhibits good stenciling properties and antisticking properties when stenciled by using thermal head. Thus, an urethane prepolymer obtained from diphenylmethane-4,4'-diisocyanate and polypropylene glycol (equivalent NCO/OH = 1.9) 100 was mixed with Epo Tohto YD 8125 (bisphenol A diglycidyl ether) 50 parts to give an adhesive. An polyester film was adhered on a Manilla hemp paper by using the adhesive, and a mold-releasing agent is coated on the film to obtain a stencil paper. The paper was stenciled by using a thermal head to show good antisticking properties, and the resulting printing paper gave high quality prints.

IT 125395-32-6

(adhesive, in heat-sensitive stencil)

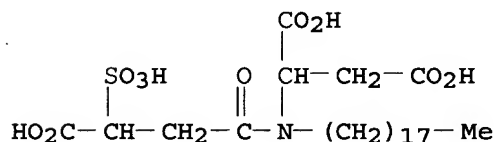
RN 125395-32-6 HCAPLUS

CN Aspartic acid, N-(3-carboxy-1-oxo-3-sulfopropyl)-N-octadecyl-, tetrasodium salt, polymer with 1,1'-methylenebis[4-isocyanatobenzene] and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

CRN 38916-42-6

CMF C26 H47 N O10 S . 4 Na

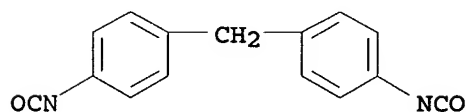


● 4 Na

CM 2

CRN 101-68-8

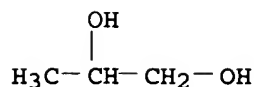
CMF C15 H10 N2 O2



CM 3

CRN 57-55-6

CMF C3 H8 O2



IC ICM B41N001-24
ICS B32B027-36
CC 74-6 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
IT 125395-30-4 125395-31-5 **125395-32-6** 125449-64-1
(adhesive, in heat-sensitive stencil)

L29 ANSWER 24 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:45500 HCAPLUS

DOCUMENT NUMBER: 112:45500

TITLE: Kinetics of reduction of silver development
centers in cellulose acid esters

AUTHOR(S): Komar, V. V.; Ermolenko, I. N.

CORPORATE SOURCE: Inst. Obshch. Neorg. Khim., USSR

SOURCE: Vestsi Akademii Navuk BSSR, Seryya Khimichnykh
Navuk (1989), (5), 10-15

CODEN: VBSKAK; ISSN: 0002-3590

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB A study was made of the kinetics of the visible image formation in
cellulose acid esters using Ag latent image centers produced
either during exposure of the partially substituted Ag salts of
the cellulose esters, or during AgNO₃ processing of the exposed
layers based on the H-form of the cellulose acid esters.
Participation of the CO₂H groups in the visualization of Ag latent
image centers was demonstrated. The rate of development of the
latent centers depended on the nature and content of the ionogenic
groups in cellulose esters, and on the character of the latent
centers formation (during or after the exposure). With increase
of development temperature development rate increased.

IT 56093-81-3, Cellulose ethylenediaminetetracetic acid ester
(photoimaging layer from, kinetics of development of silver
latent image centers formed in)

RN 56093-81-3 HCAPLUS

CN Cellulose, ester with N,N'-1,2-ethanediyibis[N-
(carboxymethyl)glycine] (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

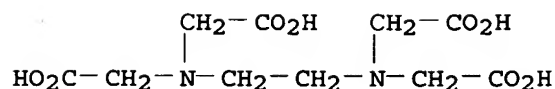
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 60-00-4

CMF C10 H16 N2 O8



CC 74-13 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
IT 9004-32-4, Carboxymethyl cellulose 9004-70-0, Cellulose nitrate
9032-38-6, Cellulose citrate **56093-81-3**, Cellulose
ethylenediaminetetracetic acid ester
(photoimaging layer from, kinetics of development of silver
latent image centers formed in)

L29 ANSWER 25 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:20001 HCAPLUS

DOCUMENT NUMBER: 106:20001

TITLE: Polymerizable dye components for condensation
polymers

INVENTOR(S): Pruett, Wayne Payton; Wang, Richard Hsu Shien;
Hilbert, Samuel David; Weaver, Max Allen

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8604904	A1	19860828	WO 1986-US298	1986 0213
W: AU, JP, KR RW: BE, DE, FR, GB, IT, NL				
US 4617373	A	19861014	US 1986-823424	1986 0128
AU 8655136	A1	19860910	AU 1986-55136	1986 0213
AU 579923	B2	19881215		
EP 215054	A1	19870325	EP 1986-901615	1986 0213
EP 215054	B1	19900103		
R: BE, DE, FR, GB, IT, NL				
JP 62501856	T2	19870723	JP 1986-501257	1986 0213
JP 07116281	B4	19951213		
CA 1282528	A1	19910402	CA 1986-501770	1986 0213
ZA 8601130	A	19860924	ZA 1986-1130	1986 0214
ZA 8601129	A	19861029	ZA 1986-1129	

				1986 0214
ES 552037	A1	19870901	ES 1986-552037	
				1986 0214
ES 552038	A1	19870916	ES 1986-552038	
				1986 0214
CN 86101649	A	19870121	CN 1986-101649	
				1986 0215
CN 1008100	B	19900523		
PRIORITY APPLN. INFO.:			US 1985-702106	A 1985 0215
			US 1986-823424	A 1986 0128
			WO 1986-US298	A 1986 0213

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

AB Polymerizable dyes R1R2C:CHR3 (I) and II-IV [R1, R2 = CN, carbalkoxy, carbaryloxy, carbaralkyloxy, carbamyl, carboxy, N-alkylcarbamyl, N-alkyl-N-arylcarbamyl, N,N-dialkylcarbamyl, N-arylcarbamyl, N-cyclohexylcarbamyl, aryl, 2-benzoxazolyl, 2-benzothiazolyl, 2-benzimidazolyl, 1,3,4-thiadiazol-2-yl, 1,3,4-oxadiazol-2-yl, alkylsulfonyl, arylsulfonyl, acyl; R3 = Q1-Q4, p-C6H4NR4R5; R4, R5 = H, (un)substituted cycloalkyl, (un)substituted Ph, lower alkenyl, (un)substituted C1-8 alkyl; R6, R7, R8 = H, alkyl; R9 = H, alkyl, aryl; Z = direct bond, CO2, O, S, SO2, SS, O2CZ2CO2, O2CNH22NHCO2, OCO2, arylene, alkylene; Z2 = alkylene, arylene; Z1 = alkylene, arylene, aralkylene, alkyleneoxy, alkyleneoxyalkylene; R = H, F, Cl, Br, alkyl, alkoxy, Ph, PhO, alkylthio, arylthio; n = 0, 1, 2] are prepared and copolymd., in an amount of 1.0-5000 ppm, with comonomers to form colored plastic compns. having intrinsic viscosity .apprx.0.4-1.2, which are useful for molding and fiber applications. Thus, 4-(N,N-dimethylamino)cinnamaldehyde was condensed with Me cyanoacetate under reflux to give V, which had λ_{\max} 464 nm (ϵ = 38,000). V was copolymd. at 200 ppm with di-Me terephthalate and ethylene glycol to give a brilliant yellow polyester.

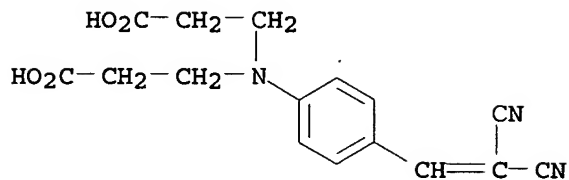
IT 105898-62-2P

(manufacture of, yellow)

RN 105898-62-2 HCAPLUS

CN β -Alanine, N-(carboxymethyl)-N-[4-(2,2-dicyanoethenyl)phenyl]-, polymer with hexanedioic acid and 1,6-hexanediamine (9CI) (CA INDEX NAME)

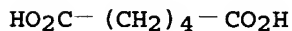
CM 1

CRN 105898-61-1
CMF C16 H15 N3 O4

CM 2

CRN 124-09-4
CMF C6 H16 N2

CM 3

CRN 124-04-9
CMF C6 H10 O4IC ICM C08G063-68
ICS C08G069-48CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and
Photographic Sensitizers)
Section cross-reference(s): 35, 37, 40IT 105898-62-2P
(manufacture of, yellow)

L29 ANSWER 26 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:603668 HCAPLUS

DOCUMENT NUMBER: 103:203668

TITLE: Photographic sensitivity of cation-exchange
esters of cellulose

AUTHOR(S): Ermolenko, I. N.; Komar, V. V.

CORPORATE SOURCE: Inst. Obshch. Neorg. Khim., Minsk, USSR

SOURCE: Zhurnal Prikladnoi Khimii (Sankt-Peterburg,
Russian Federation) (1985), 58(9), 2083-9
CODEN: ZPKHAB; ISSN: 0044-4618

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Cellulose esters containing acidic groups which can undergo dissociation or ion exchange (carboxylic-, phosphoric-, or sulfo-groups) formed latent image centers when exposed to UV radiation. The layers containing esters in H-form were, after exposure, subjected to ion exchange using 0.1N AgNO_3 , then developed with Metol or Amidol developers. The layers containing esters in their salt-form were,

after exposure, developed with Metol-hydroquinone, Amidol or Cu-HCOH developers. Photosensitivity of the esters proceeded through a maximum which depended on the content of acid groups and a degree (F) of their substitution by Ag⁺ (in both cases where exposure was made for Ag-form of ester and when Ag-form was formed during processing). Maximum sensitivity and development selectivity was observed for CMC and cellulose citrate with acid group content 1.2 and 2.5 weight%, resp., and F = 0.1-0.2.

IT 56093-81-3D, silver complex
(photosensitivity and image formation in layers of)
RN 56093-81-3 HCAPLUS
CN Cellulose, ester with N,N'-1,2-ethanediybis[N-(carboxymethyl)glycine] (9CI) (CA INDEX NAME)

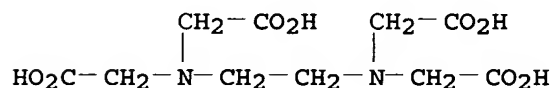
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 60-00-4
CMF C10 H16 N2 O8



CC 74-13 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
IT 7440-22-4D, complexes with cellulose-EDTA ester 9004-32-4
9015-14-9 9032-38-6 9032-38-6D, silver salt 9032-46-6
9040-34-0 37264-87-2 56093-81-3D, silver complex
76482-75-2 76901-16-1 88922-76-3
(photosensitivity and image formation in layers of)

L29 ANSWER 27 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:229438 HCAPLUS

DOCUMENT NUMBER: 102:229438

TITLE: Liquid developer for development of electrostatic images

INVENTOR(S): Uytterhoeven, Herman Jozef; De Winter, Walter Frans; Marien, August Marcel

PATENT ASSIGNEE(S): Agfa-Gevaert N. V., Belg.

SOURCE: Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 133628	A1	19850306	EP 1983-201162	

1983
0805

EP 133628 B1 19870826
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
US 4564574 A 19860114 US 1984-632059

1984
0718

JP 60121458 A2 19850628 JP 1984-164177

1984
0803

PRIORITY APPLN. INFO.: EP 1983-201162 A

1983
0805

AB A liquid electrophoretic developer composition for developing neg. charged electrostatic latent images is comprised of an elec. insulating nonpolar carrier liquid (e.g., isododecane) having the elec. resistivity of $>10^9 \Omega\text{-cm}$ and the dielec. constant of <3 , a coloring agent (e.g., C black), and ≥ 1 polymer coordination compound having pos. charged groups of a metal ion neutralized with counter anions (e.g. Al hydroxyabietate-iso-Bu methacrylate-stearyl methacrylate-N-vinylbenzyliminodiacetic acid copolymer coordination compound).

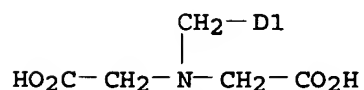
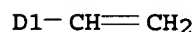
IT 96663-77-3D, reaction products with aluminum hydroxyabietate (electrostatog. liquid electrophoretic developer compns. containing)

RN 96663-77-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, polymer with 2-methylpropyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

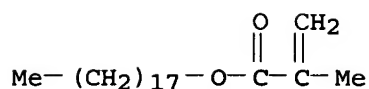
CM 1

CRN 65405-48-3
CMF C13 H15 N O4
CCI IDS



CM 2

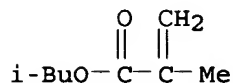
CRN 32360-05-7
CMF C22 H42 O2



CM 3

CRN 97-86-9

CMF C8 H14 O2



IC ICM G03G009-12

CC 74-3 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 514-10-3D, aluminum complexes, reaction products with iso-Bu
methacrylate-stearyl methacrylate-vinylbenzyliminodiacetic acid
copolymer 31807-55-3 53660-42-7 84191-70-8
96663-77-3D, reaction products with aluminum
hydroxyabietate 96685-70-0

(electrostatog. liquid electrophoretic developer compns. containing)

L29 ANSWER 28 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:140781 HCAPLUS

DOCUMENT NUMBER: 102:140781

TITLE: Toner for developing electrostatic images

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 59189357	A2	19841026	JP 1983-64943	1983 0412
JP 03018707	B4	19910313	JP 1983-64943	1983 0412

PRIORITY APPLN. INFO.: JP 1983-64943

AB In an electrophotog. toner consisting of a binder and a coloring agent, the binder resin is a polyester containing structural units derived from R1R2NZNR3R4 [R1, R2, R3, R4 = H, OH, alkyl, aryl, carboxyalkyl, carboxyaryl; ≥2 groups contain carboxyl; Z = organic connecting group]. The toner is pos. charged, possesses a high offset set-in temperature, and shows good adhesion.

IT 95626-97-4 95626-98-5 95626-99-6
95627-03-5 95627-04-6 95627-05-7
95663-53-9

(electrophotog. toner binder resin compns. containing)

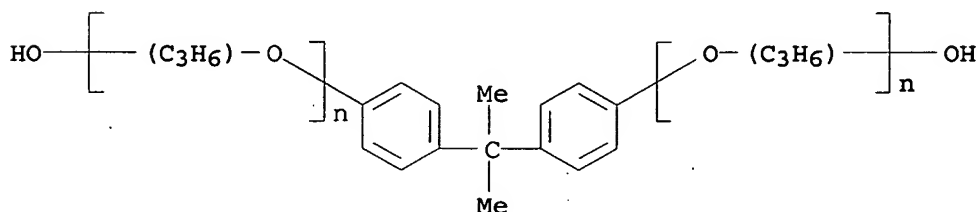
RN 95626-97-4 HCAPLUS
 CN Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, polymer with
 1,4-benzenedicarboxylic acid, 2,2-bis(hydroxymethyl)-1,3-
 propanediol and α,α' -[(1-methylethylidene)di-4,1-
 phenylene]bis[ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]]
 (9CI) (CA INDEX NAME)

CM 1

CRN 37353-75-6

CMF (C3 H6 O)n (C3 H6 O)n C15 H16 O2

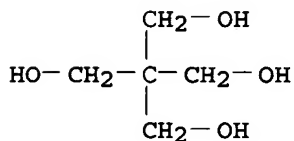
CCI IDS, PMS



CM 2

CRN 115-77-5

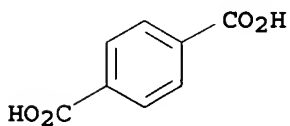
CMF C5 H12 O4



CM 3

CRN 100-21-0

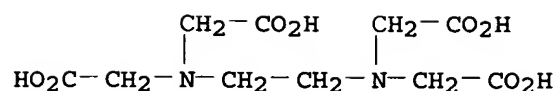
CMF C8 H6 O4



CM 4

CRN 60-00-4

CMF C10 H16 N2 O8



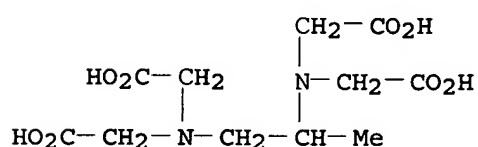
RN 95626-98-5 HCAPLUS

CN Glycine, N,N'-(1-methyl-1,2-ethanediyl)bis[N-(carboxymethyl)-,
polymer with 1,4-benzenedicarboxylic acid and 1,4-butanediol (9CI)
(CA INDEX NAME)

CM 1

CRN 4408-81-5

CMF C11 H18 N2 O8



CM 2

CRN 110-63-4

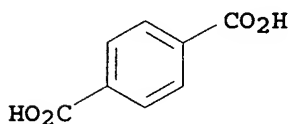
CMF C4 H10 O2



CM 3

CRN 100-21-0

CMF C8 H6 O4



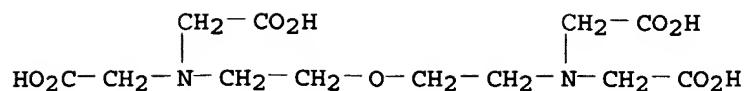
RN 95626-99-6 HCAPLUS

CN Glycine, N,N'-(oxydi-2,1-ethanediyl)bis[N-(carboxymethyl)-,
polymer with 1,3-benzenedicarboxylic acid and 2,2'-[1,2-
ethanediylbis(oxy)]bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 923-73-9

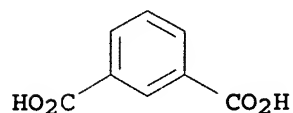
CMF C12 H20 N2 O9



CM 2

CRN 121-91-5

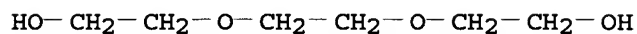
CMF C8 H6 O4



CM 3

CRN 112-27-6

CMF C6 H4 O4



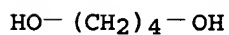
RN 95627-03-5 HCAPLUS

CN Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-, polymer with 1,4-benzenedicarboxylic acid and 1,4-butanediol (9CI) (CA INDEX NAME)

CM 1

CRN 110-63-4

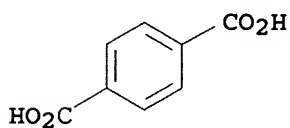
CMF C4 H10 O2



CM 2

CRN 100-21-0

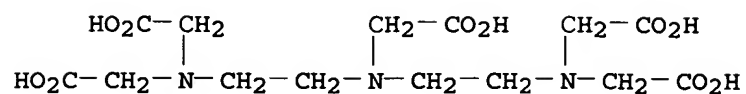
CMF C8 H6 O4



CM 3

CRN 67-43-6

CMF C14 H23 N3 O10



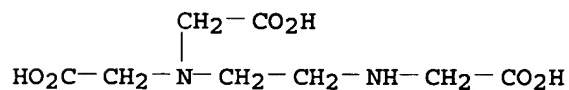
RN 95627-04-6 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[2-[(carboxymethyl)amino]ethyl]-, polymer with 1,3-benzenedicarboxylic acid, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 2,2'-[1,2-ethanediylbis(oxy)]bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 688-57-3

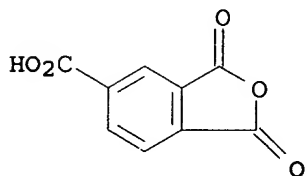
CMF C8 H14 N2 O6



CM 2

CRN 552-30-7

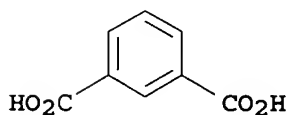
CMF C9 H4 O5



CM 3

CRN 121-91-5

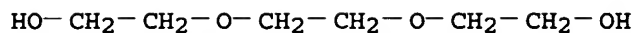
CMF C8 H6 O4



CM 4

CRN 112-27-6

CMF C6 H14 O4



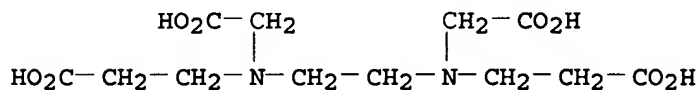
RN 95627-05-7 HCAPLUS

CN β -Alanine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, polymer with 1,4-benzenedicarboxylic acid and 1,4-butanediol (9CI) (CA INDEX NAME)

CM 1

CRN 32701-19-2

CMF C12 H20 N2 O8



CM 2

CRN 110-63-4

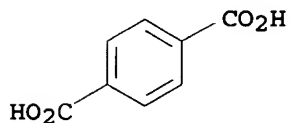
CMF C4 H10 O2



CM 3

CRN 100-21-0

CMF C8 H6 O4



RN 95663-53-9 HCAPLUS

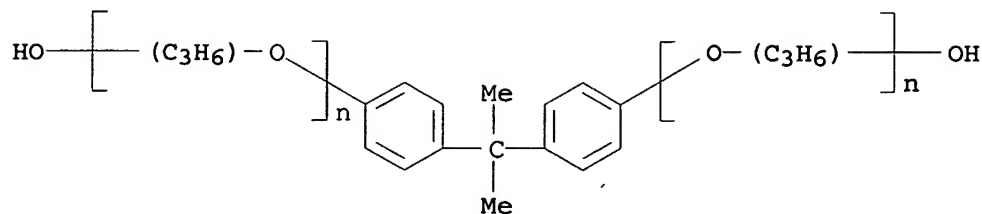
CN Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, polymer with 1,3-benzenedicarboxylic acid, α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]] and 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 37353-75-6

CMF (C3 H6 O)_n (C3 H6 O)_n C15 H16 O2

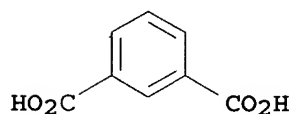
CCI IDS, PMS



CM 2

CRN 121-91-5

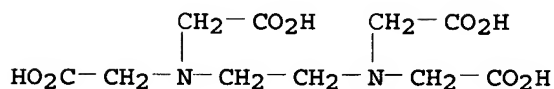
CMF C8 H6 O4



CM 3

CRN 60-00-4

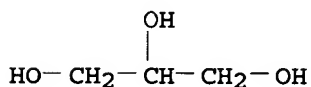
CMF C10 H16 N2 O8



CM 4

CRN 56-81-5

CMF C3 H8 O3



IC G03G009-08

CC 74-3 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

IT 25213-39-2 95626-97-4 95626-98-5

95626-99-6 95627-00-2 95627-02-4 95627-03-5

95627-04-6 95627-05-7 95663-53-9

(electrophotog. toner binder resin compns. containing)

L29 ANSWER 29 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:122953 HCAPLUS

DOCUMENT NUMBER: 102:122953

TITLE: Effect of polymer-supported donor on the

tris(2,2'-bipyridine)ruthenium(II)-
 photosensitized reduction of a Schiff base
 cobalt(III) complex

AUTHOR(S): Kurimura, Yoshimi; Takato, Kiyomi; Takeda,
 Mutsuko; Ohtsuka, Naomi

CORPORATE SOURCE: Dep. Chem., Ibaraki Univ., Mito, 310, Japan

SOURCE: Journal of Physical Chemistry (1985), 89(6),
 1023-6
 CODEN: JPCHAX; ISSN: 0022-3654

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effect of polymer-supported donors, vinylbenzylamine-N,N-
 diacetate-co-styrenesulfonate (P-SS) and vinylbenzylamine-N,N-
 diacetate-co-N-vinylpyrrolidone (P-VPRO), on the
 Ru(bpy)₃²⁺-photosensitized reduction of a Schiff base cobalt(III)
 complex was investigated in aqueous solns. at pH 6.2, I = 0.03, and
 25°. The apparent quenching rate constant of the excited
 state of Ru(bpy)₃²⁺ with the cobalt(III) complex increases by the
 addition of P-SS or P-VPRO. A decreasing order of the apparent
 quenching rate constant in the presence of a given concentration of the
 amine-diacetate analogs (3.0 × 10⁻⁴ M) is P-SS >> P-VvPRO >
 benzylamine-N,N-diacetate (BDA). On the other hand, the charge
 separation efficiency for the Ru(bpy)₃²⁺-photosensitized reduction of the
 cobalt(III) complex was enhanced in P-VPRO solution by appr. twice
 and, however, suppressed considerably in P-SS solution relative to
 the corresponding low mol. weight donor solution. The effect of
 polymer-supported donors on the charge separation efficiency is
 discussed in terms of the local concns. and distributions of the
 reactant ions in the microheterogeneous region of the polyion
 domains.

IT 94800-09-6 94800-11-0
 (photolysis of system containing tris(bipyridine)ruthenium(2+),
 Schiff base cobalt(III) complex and, in aqueous solution)

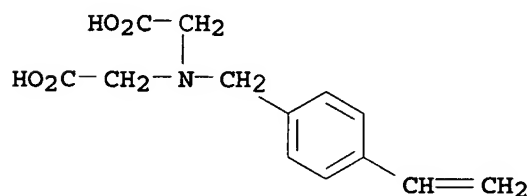
RN 94800-09-6 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-,
 monosodium salt, polymer with sodium 4-ethenylbenzenesulfonate
 (9CI) (CA INDEX NAME)

CM 1

CRN 94800-08-5

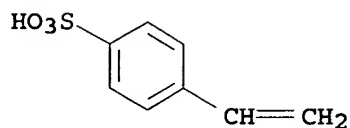
CMF C13 H15 N O4 . Na



● Na

CM 2

CRN 2695-37-6
CMF C8 H8 O3 S . Na

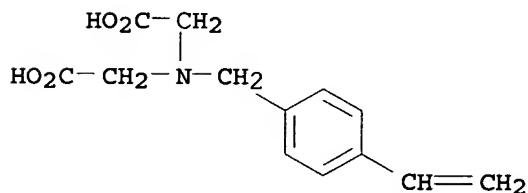


● Na

RN 94800-11-0 HCAPLUS
CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, monosodium salt, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

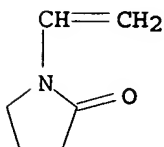
CRN 94800-08-5
CMF C13 H15 N O4 . Na



● Na

CM 2

CRN 88-12-0
CMF C6 H9 N O



CC 74-1 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
IT 94800-09-6 94800-11-0
(photolysis of system containing tris(bipyridine)ruthenium(2+), Schiff base cobalt(III) complex and, in aqueous solution)

L29 ANSWER 30 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:612892 HCAPLUS
 DOCUMENT NUMBER: 95:212892
 TITLE: Light sensitivity of the complex of cellulose derivatives with methylene blue
 AUTHOR(S): Savastenko, G. N.; Ermolenko, I. N.
 CORPORATE SOURCE: Inst. Obshch. Neorg. Khim., Minsk, USSR
 SOURCE: Vestsi Akademii Navuk BSSR, Seryya Khimichnykh Navuk (1981), (5), 45-9
 CODEN: VBSKAK; ISSN: 0002-3590
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian

AB Photoimaging layers containing cellulose ethylenediaminetetraacetate or monocarboxy cellulose and methylene blue dye were imagewise exposed to visible light, soaked in aqueous AgNO₃ (10⁻³ N) for 30 min, and developed in a phys. developer containing (a) AgNO₃ 0.289 g, H₂O 100 mL; (b) Metol 0.3 g, H₂O 103 mL; and (c) citric acid 3.1 g, H₂O 100 mL (a:b:c = 2.5:6:4) to give a black neg. image. The exposed layers were also developed in a phys. developer (after soaking in PdCl₂ for 2 min.) containing (a) CuSO₄·5H₂O 85, K Na tartrate 85, NaOH 25 g/L; and (b) HCHO (a:b = 10:1) to give a neg. image.

IT 57171-60-5
 (photoimaging composition containing methylene blue and)
 RN 57171-60-5 HCAPLUS
 CN Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, compd. with cellulose (9CI) (CA INDEX NAME)

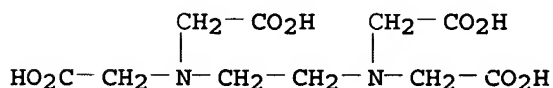
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 60-00-4
 CMF C10 H16 N2 O8



CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT 9032-53-5 57171-60-5
 (photoimaging composition containing methylene blue and)

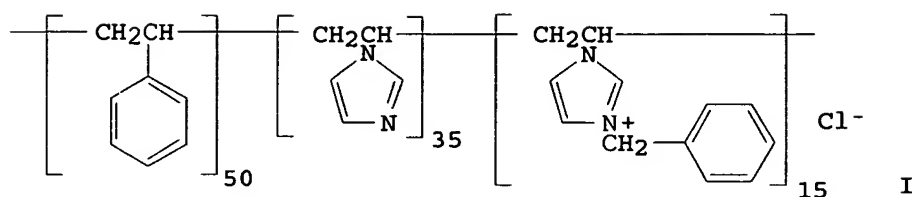
L29 ANSWER 31 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:540964 HCAPLUS
 DOCUMENT NUMBER: 93:140964
 TITLE: Photographic recording material containing polymers which coordinate with metal ions
 INVENTOR(S): Archie, William Councill, Jr.; Campbell, Gerald Allan; Petrak, Karel Ladislav
 PATENT ASSIGNEE(S): Eastman Kodak Co., USA
 SOURCE: Eur. Pat. Appl., 86 pp.

DOCUMENT TYPE: CODEN: EPXXDW
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: English
 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 9411	A2	19800402	EP 1979-301973	1979 0921
EP 9411	A3	19800709		
EP 9411	B1	19830601		
EP 9411	B2	19861126		
R: BE, CH, DE, FR, GB				
US 4239847	A	19801216	US 1978-944477	1978 0921
US 4229515	A	19801021	US 1978-960213	1978 1113
CA 1176900	A1	19841030	CA 1979-333569	1979 0810
JP 55048210	A2	19800405	JP 1979-120952	1979 0921
EP 56664	A2	19820728	EP 1982-102622	1979 0921
EP 56664	A1	19820728		
EP 56664	A3	19830316		
EP 56664	B1	19861112		
R: BE, CH, DE, FR, GB				
CA 1141889	A1	19830222	CA 1979-337087	1979 1005
US 4299895	A	19811110	US 1979-102099	1979 1210
US 4316972	A	19820223	US 1980-150038	1980 0515
PRIORITY APPLN. INFO.:			US 1978-944477	A 1978 0921
			US 1978-960213	A 1978 1113
			EP 1979-301973	A 1979 0921

GI



AB An image transfer photog. material, which gives dye images of improved light stability, contains in the mordant layer a polymer capable of forming a coordination complex with the metal ions of the film assembly, especially those polymers containing heterocyclic tertiary amine groups, such as pol(vinylpyridine) and poly(vinylimidazole). This prevents diffusion of the metal ions throughout the recording layer but allows rapid metalization of the dye-forming material in the vicinity of the mordant. Thus, poly(ethylene terephthalate) support was coated successively with layers containing gelatin 1.08 and NiSO₄·6H₂O 0.58; gelatin 2.16 and I 3.24; TiO₂ 16.2 and gelatin 2.5; and gelatin 0.54 g/m² and bisvinylsulfonylmethyl ether at 20 weight% of the total gelatin, then analyzed for Ni before and after 1 h washing with H₂O. The results showed effective retaining of the Ni ions in the prepared receptor.

IT 72688-65-4 74216-84-5 74925-75-0

74925-76-1 74930-90-8 74930-91-9

(color photog. diffusion-transfer emulsions containing, for rendering metal ions immobile)

RN 72688-65-4 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

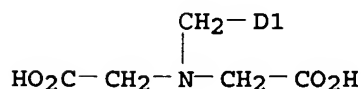
CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS



D1-CH=CH₂



● 2 Na

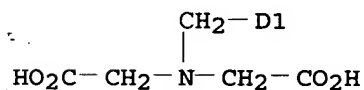
RN 74216-84-5 HCAPLUS
 CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium
 salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8
 CMF C13 H15 N O4 . 2 Na
 CCI IDS



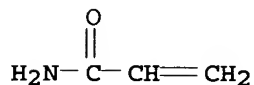
D1-CH=CH₂



● 2 Na

CM 2

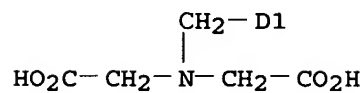
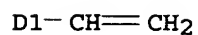
CRN 79-06-1
 CMF C3 H5 N O



RN 74925-75-0 HCAPLUS
 CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium
 salt, polymer with sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8
 CMF C13 H15 N O4 . 2 Na
 CCI IDS

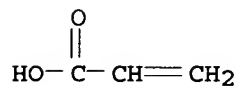


● 2 Na

CM 2

CRN 7446-81-3

CMF C3 H4 O2 . Na



● Na

RN 74925-76-1 HCAPLUS

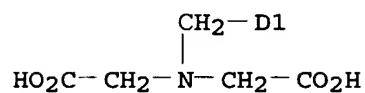
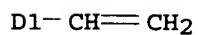
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with 4-ethenylpyridine (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS

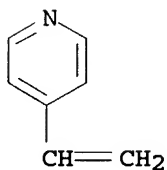


●2 Na

CM 2

CRN 100-43-6

CMF C7 H7 N



RN 74930-90-8 HCAPLUS

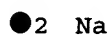
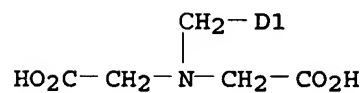
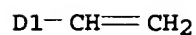
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with 1-ethenyl-1H-imidazole (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

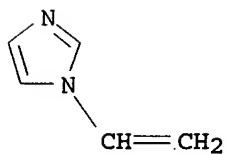
CCI IDS



CM 2

CRN 1072-63-5

CMF C5 H6 N2



RN 74930-91-9 HCAPLUS

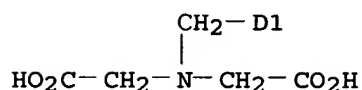
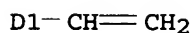
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with 2-sulfoethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

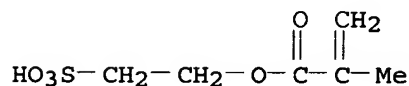
CCI IDS



CM 2

CRN 1804-87-1

CMF C6 H10 O5 S . Na



IC G03C005-54; C08F026-06; C08F226-02; C08F220-54

CC 74-2 (Radiation Chemistry, **Photochemistry**, and **Photographic Processes**)

IT 60755-40-0 61386-49-0 72688-43-8 **72688-65-4**
74216-84-5 74921-74-7 74921-75-8 74921-76-9
 74921-77-0 74921-78-1 74921-80-5 74921-81-6 74921-82-7
 74921-83-8 74921-85-0 74921-86-1 74921-87-2 74921-88-3
 74921-89-4 74921-90-7 74925-74-9 **74925-75-0**
74925-76-1 74930-89-5 **74930-90-8**
74930-91-9

(color photog. diffusion-transfer emulsions containing, for rendering metal ions immobile)

L29 ANSWER 32 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:458191 HCAPLUS

DOCUMENT NUMBER: 93:58191

TITLE: Polymers for use in image receiving elements
 for metallizable dyes in image transfer film
 units

INVENTOR(S): Campbell, Gerald A.; Hamilton, Lewis R.;
 Brust, David P.

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: U.S., 24 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 4193796	A	19800318	US 1978-971620	1978 1220
US 4228257	A	19801014	US 1979-46138	1979 0606
CA 1158396	A1	19831206	CA 1979-339481	1979 1108
PRIORITY APPLN. INFO.:			US 1978-971620	A3 1978 1220

AB Water-dispersible chelates of copolymers of an N-vinylbenzyliminodiacetate and an acrylamide or anionic sulfonate are used in the mordant-containing receptor sheet of diffusion transfer film assemblies to improve the stability of the dye images formed with dyes containing chelating groups. Thus, a single-color photog. multilayer assembly containing gelatin receptor layers of poly(4-vinylpyridine) mordant and metal chelating polymer (50/50 2-sulfoethyl methacrylate-di-Na N-vinylbenzyliminodiacetate polymer converted to the chelate by the addition of NiSO₄.6H₂O) (I) was exposed through a graduated d. scale and then processed to give a dye image which showed a loss of -0.14 (loss on 40 day simulated average northern skylight irradiation fading test) vs. -0.56 for I-free control.

IT 72688-66-5D, nickel complex
 (color diffusion-transfer photog. films with receptor layers containing, for improved image stability)

RN 72688-66-5 HCAPLUS

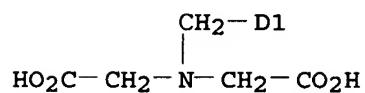
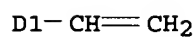
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, polymer with 2-sulfoethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 65405-48-3

CMF C13 H15 N O4

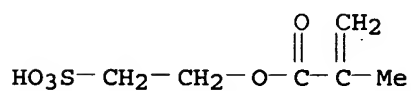
CCI IDS



CM 2

CRN 1804-87-1

CMF C6 H10 O5 S . Na



● Na

IT 74216-84-5DP, nickel complex 74216-84-5P
(preparation of)

RN 74216-84-5 HCAPLUS

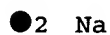
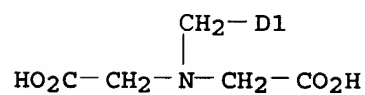
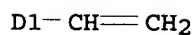
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium
salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

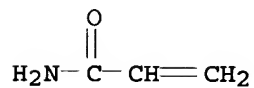
CCI IDS



CM 2

CRN 79-06-1

CMF C3 H5 N O



RN 74216-84-5 HCAPLUS

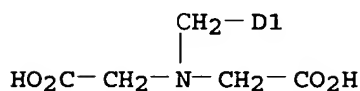
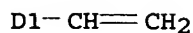
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

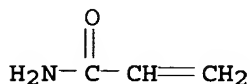
CCI IDS



●2 Na

CM 2

CRN 79-06-1
CMF C3 H5 N O



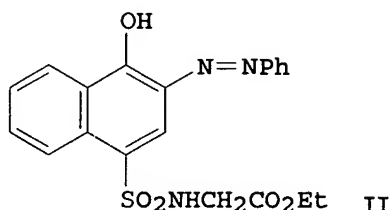
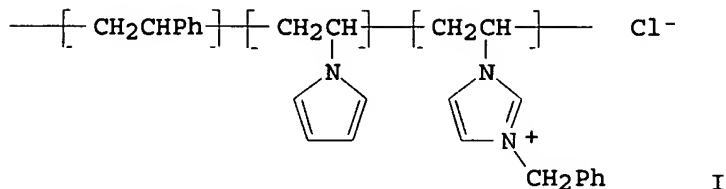
IC G03C005-54; G03C001-40; G03C001-76; G03C003-00
INCL 430227000
CC 74-2 (Radiation Chemistry, **Photochemistry**, and
Photographic Processes)
IT 7440-02-0D, complexes with vinylbenzyliminodiacetic acid-containing
copolymers 7440-50-8, uses and miscellaneous 72688-66-5D
, nickel complex
(color diffusion-transfer photog. films with receptor layers
containing, for improved image stability)
IT 74216-84-5DP, nickel complex 74216-84-5P
(preparation of)

L29 ANSWER 33 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1980:85856 HCAPLUS
DOCUMENT NUMBER: 92:85856
TITLE: Photographic elements containing polymers
which coordinate with metal ions
AUTHOR(S): Hawks, George H., III; Merers, Drewfus Y.,
Jr.; Archie, William C., Jr.; Villard, George;
Campbell, Gerald A.; Petrak, Karel L.;
Hamilton, Lewis R.; Brust, David P.; Wilkes,
Glenn R.; et al.
CORPORATE SOURCE: UK
SOURCE: Research Disclosure (1979), 185, 505-12 (No.
18534)
CODEN: RSDSBB; ISSN: 0374-4353
DOCUMENT TYPE: Journal; Patent
LANGUAGE: English

USHA SHRESTHA EIC 1700 REM 4B28

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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RD 185034		19790910		
PRIORITY APPLN. INFO.: 19790910			RD 1979-185034	
GI				



AB A color diffusion-transfer photog. film unit is comprised of a support, a metalizable dye (dye ligand) or metalizable dye ligand-forming material, and mordanting image receiving layer containing a polymer containing ligand groups which form coordination complexes with metal ions and a source of metal ions. The polymer contains 5-100 weight% of the recurring units having the structure $[\text{CH}_2\text{Cr}[\text{ZN}(\text{CH}_2\text{CO}_2\text{M})_2]]$ (R = H, halogen, Cl-6 alkyl; Z = bivalent linking group; M = H, NH_4 , alkali metal). By using the photog. film unit, the diffusion of metal ions is effectively prevented while the image dye-forming material is rapidly metalized in the vicinity of the mordant to provide a dye image with improved light stability. Thus, an image receiving element was prepared by coating a transparent poly(ethylene terephthalate) film support with a layer containing gelatin 1.08 and $\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$ 0.58 g/m², a layer containing gelatin 2.16 and a partially quaternized poly(vinylimidazole) copolymer I 3.24 g/m², a reflecting layer containing gelatin 0.54 g/m² and bisvinylsulfonylmethyl ether 2.0 weight% (based on gelatin), washed in H_2O for 1 h, and analyzed by x-ray fluorescence to show that the element was effective in retaining the Ni ion. Another sample of the image receiving element was laminated to an imagewise exposed, single-color photog. element containing a metalizable magenta dye II and processed by spreading a viscous processing composition between the 2 elements for 2 min. Upon separation the image receiving element was washed in H_2O and dried to reveal a well-defined magenta dye formed by complexing dye II with the Ni ion in the image receiving element.

IT 72688-65-4P 72688-66-5DP, nickel complexes
(preparation of)

RN 72688-65-4 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, disodium

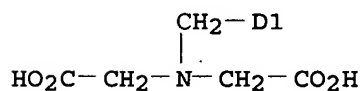
salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 70892-99-8

CMF C13 H15 N O4 . 2 Na

CCI IDS

D1-CH=CH₂

●2 Na

RN 72688-66-5 HCAPLUS

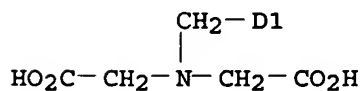
CN Glycine, N-(carboxymethyl)-N-[(ethenylphenyl)methyl]-, polymer with 2-sulfoethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 65405-48-3

CMF C13 H15 N O4

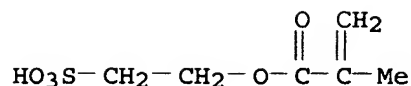
CCI IDS

D1-CH=CH₂

CM 2

CRN 1804-87-1

CMF C6 H10 O5 S . Na



● Na

CC 74-2 (Radiation Chemistry, Photochemistry, and
Photographic Processes)
IT 7440-02-0DP, complexes with sodium sulfoethyl methacrylate-
vinylbenzyliminodiacetic acid copolymer 72688-65-4P
72688-66-5DP, nickel complexes
(preparation of)

L29 ANSWER 34 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1976:67789 HCAPLUS
DOCUMENT NUMBER: 84:67789
TITLE: Photographic development process
INVENTOR(S): Shibaoka, Haruo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2455002	A1	19750522	DE 1974-2455002	1974 1120
JP 50081539	A2	19750702	JP 1973-130378	1973 1120
GB 1429919	A	19760331	GB 1974-50393	1974 1120
PRIORITY APPLN. INFO.:			JP 1973-130378	A 1973 1120

AB Developers for use in high-temperature, high-speed processing of black-and-white films are described. The developers, which show decreased fog formation and give decreased reduction in contrast, contain along with the usual developing agents, antifoggants, and additives, a dialdehyde, such as glutaraldehyde, at 1-50 and a polyalkylene glycol (mol. weight 1000-9000) at 0.0005-10 g/l. of developer. Thus, 25.4 + 30.5 cm black-and-white photog. films were exposed and developed in a transport-roll developing apparatus containing a developer with the following composition: hydroxyethylethylenediaminetriacetic acid 0.8, Na₂SO₃ 50, KOH 20, hydroquinone 25, 1-phenyl-3-pyrazolidone 1.5, boric acid 10, triethylene glycol 25, glutaraldehyde 5, HOAc 3, NaHSO₃ 4.5, 5-nitroimidazole 0.03, 1-phenyl-5-mercaptotetrazole 0.005,

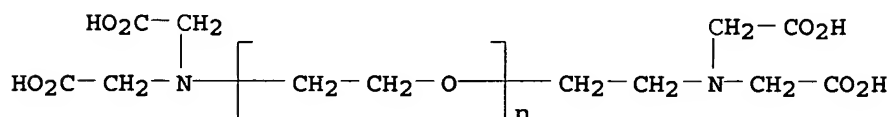
5-methylbenzotriazole 0.005, KBr 6, polyethylene glycol 0.5 g, and water to 1 l. After processing 2000 films, the fog, gradation, and sensitivity were 0.06, 2.60, and 98, resp., vs. 0.09, 2.25, and 96, resp., for a polyethylene glycol-free control.

IT 58201-47-1

(photog. developers containing glutaraldehyde-sodium hydrogen sulfite adduct, polyalkylene glycols and, for black-and-white films)

RN 58201-47-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-[bis(carboxymethyl)amino]ethyl]- ω -[bis(carboxymethyl)amino]- (9CI) (CA INDEX NAME)



IC G03C

CC 74-2 (Radiation Chemistry, **Photochemistry**, and **Photographic Processes**)

IT 58201-47-1

(photog. developers containing glutaraldehyde-sodium hydrogen sulfite adduct, polyalkylene glycols and, for black-and-white films)

L29 ANSWER 35 OF 35 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1975:586309 HCAPLUS

DOCUMENT NUMBER: 83:186309

TITLE: Bleaching agents for photographic processing

INVENTOR(S): Sakamoto, Kenro; Koboshi, Shigeharu; Koike, Toshihiko; Sadahiro, Yosuke

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

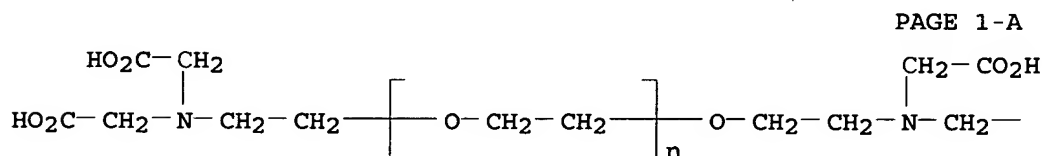
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50067657	A2	19750606	JP 1973-115744	1973 1017
PRIORITY APPLN. INFO.:			JP 1973-115744	A 1973 1017

AB Ag halide photog. processing solns. contain metal complexes of a compound of general formula $(\text{MO}_2\text{CCH}_2)_2\text{NCH}_2\text{CH}_2\text{O}(\text{CH}_2\text{CH}_2\text{O})_n\text{CH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CO}_2\text{M})_2$ (I; OM = H, alkali metal, NH_4 ; $n = 0, 1, 2$) as the bleaching agents. The bleaching agents exhibit a better bleaching strength than Fe salts of ethylenediaminetetraacetic acid, and do not cause staining. Thus, a color photog. paper was sensitometrically exposed, developed, bleach-fixed in a bath containing the Fe Na salt of $(\text{HO}_2\text{CCH}_2)_2\text{NCH}_2\text{CH}_2\text{OCH}_2\text{CH}_2\text{OCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CO}_2\text{H})_2$ (II) 40, $(\text{NH}_4)_2\text{S}_2\text{O}_3$ 100, Na_2SO_3 10 g/l, and NH_4OH (to adjust pH to 6.5), and then

stabilized. The color d. of the cyan dye images was 2.02, which decreased to 2.01 after the bleach-fix solution was used repeatedly in an automatic processing apparatus. The clearing time in the used bleach-fix solution was 27 sec vs. 45 sec for a control containing the Fe Na salt of ethylenediaminetetraacetic acid (40 g/l) and EDTA (5 g) instead of II. The cyan dye ds. in a fresh and spent control were 2.00 and 1.48, resp.

IT 57214-63-8D, Poly(oxy-1,2-ethanediyl),
 α -[2-[bis(carboxymethyl)amino]ethyl]- ω -[2-
 [bis(carboxymethyl)amino]ethoxy]-, salts, metal complexes
 (photog. processing solns. containing, for color stain prevention)
 RN 57214-63-8 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -[2-[bis(carboxymethyl)amino]ethy
 1]- ω -[2-[bis(carboxymethyl)amino]ethoxy]- (9CI) (CA INDEX
 NAME)



PAGE 1-B

—CO₂H

IC G03C
 CC 74-2 (Radiation Chemistry, Photochemistry, and
 Photographic Processes)
 IT 7439-89-6D, Iron, complex with polyethylene glycol diether with
 (dicarboxymethylamino)ethanol, salts 57214-63-8D,
 Poly(oxy-1,2-ethanediyl), α -[2-[bis(carboxymethyl)amino]ethy
 1]- ω -[2-[bis(carboxymethyl)amino]ethoxy]-, salts, metal
 complexes
 (photog. processing solns. containing, for color stain prevention)